PIONEER®
The Art of Entertainment

Operating Instructions

MiniDisc

MINIDISC RECORDER

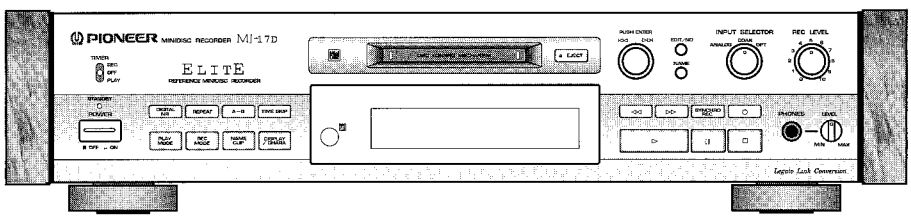
MJ-17D

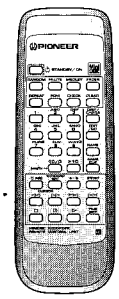
ELITE

Thank you for buying this PIONEER product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

For the shortcut to simple playback and recording, please go to "Basic Operations" on pages 14 to 17.

Basic Operations





WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT NOTICE

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

CAUTION:This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

IMPORTANT 1

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIN INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

HEED WARNINGS — All warnings on the product and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the product manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

CART — A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

VENTILATION — Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

POWER SOURCES — This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

LOCATION – The appliance should be installed in a stable location.

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

GROUNDING OR POLARIZATION

- If this product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other), it will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- If this product is equipped with a three-wire grounding type plug, a plug having a third (grounding) pin, it will only fit into a grounding type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.

LIGHTNING — For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

POWER LINES — An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the product.
- If the product has been exposed to rain or water.
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- If the product has been dropped or damaged in any way.
- When the product exhibits a distinct change in performance — this indicates a need for service.

REPLACEMENT PARTS — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

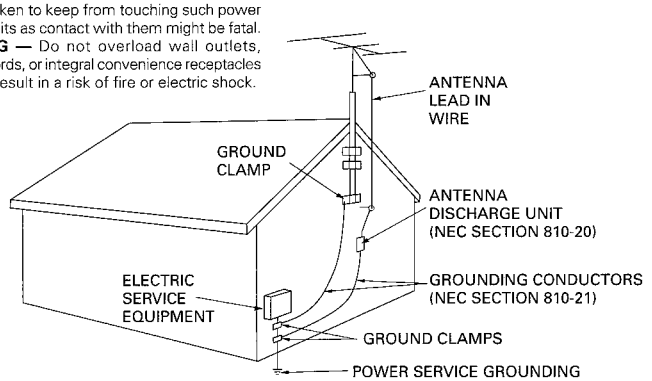

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

Fig. A

NEC — NATIONAL ELECTRICAL CODE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.

– Increase the separation between the equipment and receiver.

– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

– Consult the dealer or an experienced radio/TV technician for help.

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CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.
The following caution label appears on your unit.

CLASS 1
LASER PRODUCT

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

FEATURES

■ Advanced Parameter Processing

Advanced Parameter Processing is the technology that makes the MD capable of recording high quality audio. The MD recorder records audio data by compressing it to about 1/5 by cutting the audio at the inaudible levels to human ears. This technology is referred to as ATRAC (Adaptive TRansform Acoustic Coding). This unit analyzes the frequency characteristics of audio signal all the time using a DSP, and performs highly precise control of ATRAC so that more data is allocated to the frequency band containing most audio signal. This makes possible recording with more musical pleasure and higher fidelity in audio reverberation reproduction than before.

■ Digital NR (Noise Reduction) P.21 P.25

This is PIONEER-original technology for recording and playback with reduced noise.
The Digital NR is compatible with any audio signal containing noise, including cassette deck playback signals and broadcast signals received under poor condition. Theoretically, this feature makes use of the fact that the audio signal in the high-frequency range rarely continues for an extended period. It reduces the audible noise by detecting and reducing the noise level in the input signal.

■ Digital Record volume P.16

The level of the digital audio input can be adjustable.

■ High-speed search based on time skip function P.15

In addition to the conventional fast forward and reverse of a disc, search is also possible based on time (30 seconds or 60 seconds).

■ Medley play for playing all disc tracks like a single series of music P.20

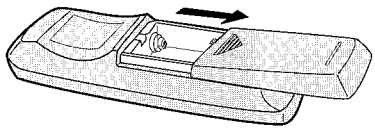
When, for example, an MD containing 10 tracks is played by medley play, all the 10 tracks will be played continuously by fading out and cutting the last 10 seconds of each track to start the next track without leaving a feeling that music has changed.

■ Legato Link Conversion

Legato Link Conversion reproduces music with closer quality to the original sound by assuming the original signal before recording from the recorded signal.

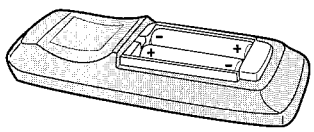
Inserting batteries into the remote control

1



While depressing the back cover, slide it in the direction of the arrow.

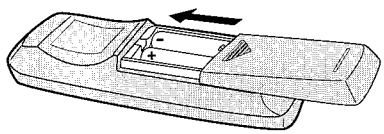
2



Insert batteries.

Make sure to match the plus (+) and minus (–) polarity guides on the batteries with the marks inside the battery compartment.

3



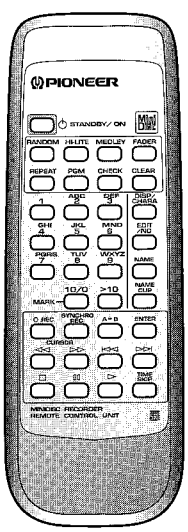
Close the cover.

Note

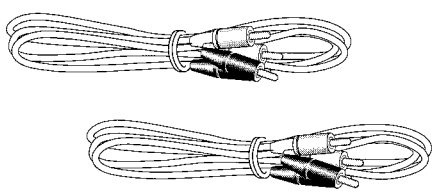
- Do not mix old and new batteries.
- Even batteries of the same type will differ in voltage. Do not mix old batteries with new batteries.
- When not using the remote control for a long period of time (over 1 month), remove the batteries to avoid possible damage from battery corrosion. If battery leakage occurs, wipe the battery liquid from the battery component, then insert new batteries.

Accessories

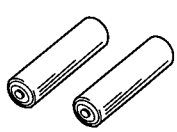
- Remote control unit x 1



- Audio cord x 2



- Batteries(AA/R6P) x 2



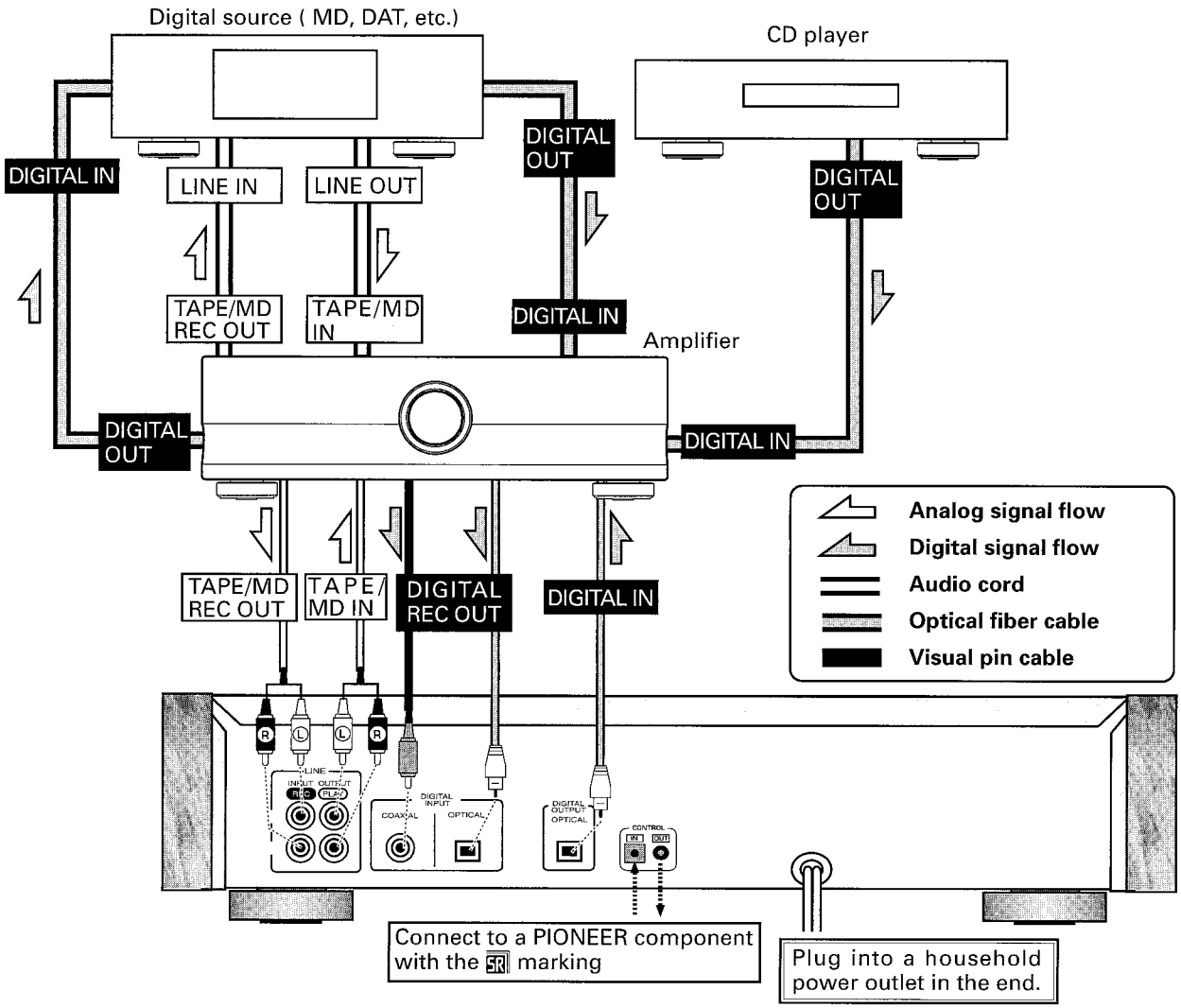
Other included items
- Warranty card
- Operating Instructions (this manual)

Connection

● When the connected amplifier has a digital input jack

Be sure to set the power switch to off and unplug the power cord from the power outlet before performing or changing the equipment connection.

- MD can be played using the digital output.
- The digital signals can be connected using either optical fiber cables or coaxial cables.
- Refer also to the instruction manual of your amplifier.

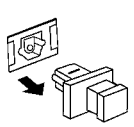


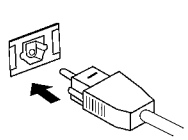
Optical fiber cable

■ Connection

1 Remove dust cap from the DIGITAL OUT OPTICAL jack.

2 Hold the optical fiber cable plug to match the jack shape and insert completely in it.

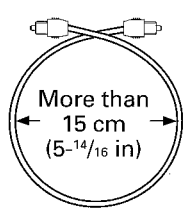




Retain the dust cap for future use.

■ Precaution for handling the optical fiber cable

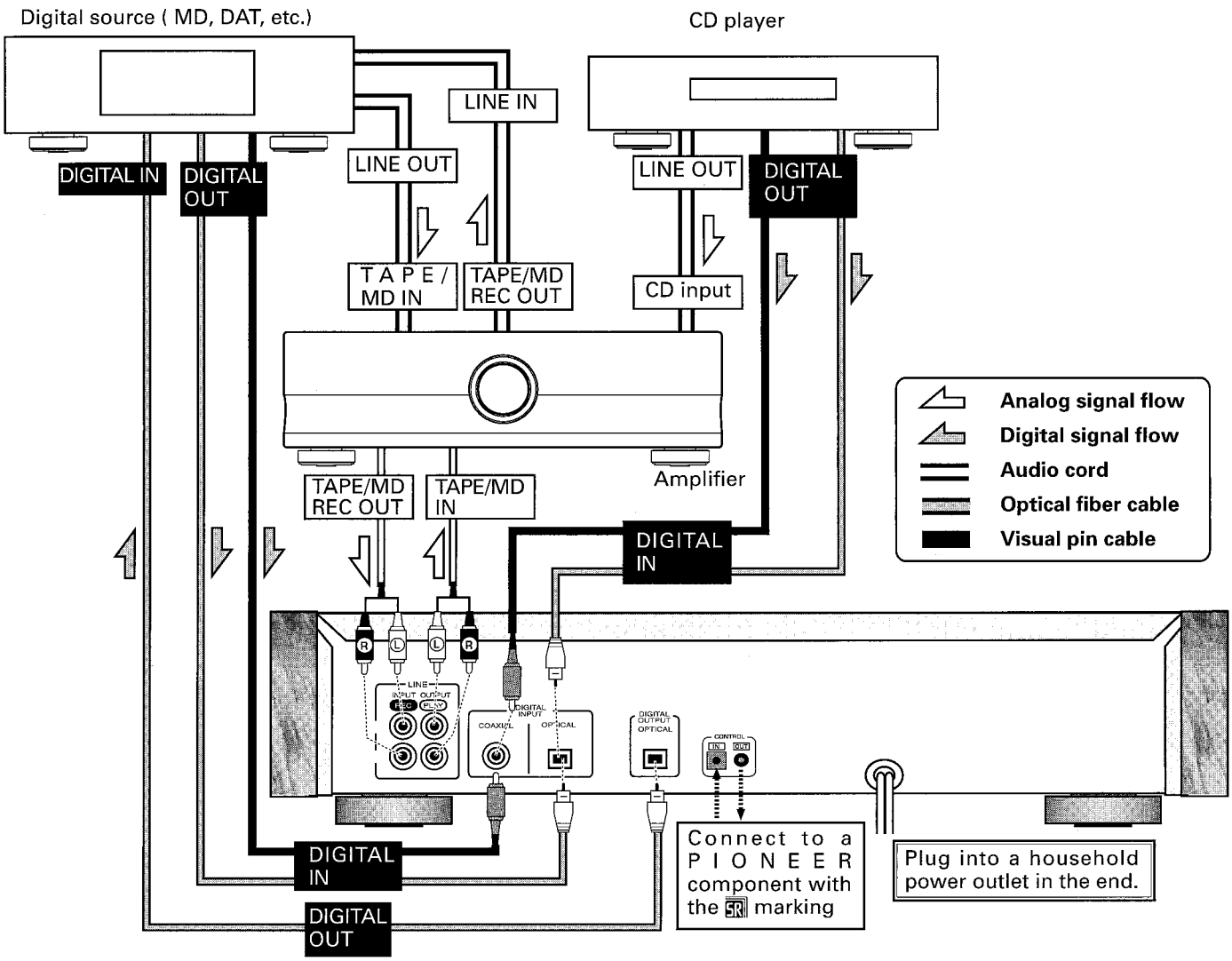
Do not bend the optical fiber cable at a sharp angle since this may damage the cable. Take particular care to avoid bending when installing in a rack, etc. When forming the cable into a loop for storage purposes, make sure that the diameter of the loop is at least 15 cm. When connecting the cable, ensure that the connectors are inserted as far as they will go to safeguard against incomplete connection.



● When the connected amplifier does not have a digital input jack

Be sure to set the power switch to off and unplug the power cord from the power outlet before performing or changing the equipment connection.

- The digital signals can be connected using either optical fiber cables or coaxial cables.
- Refer also to the instruction manual of your amplifier.



■ To connect to equipment with the Pioneer SR mark

Use a commercialy available miniplug cord (without load) to connect the CONTROL IN jack of this unit to the CONTROL OUT jack of equipment with the SR mark. This allows you intensified control of the system.

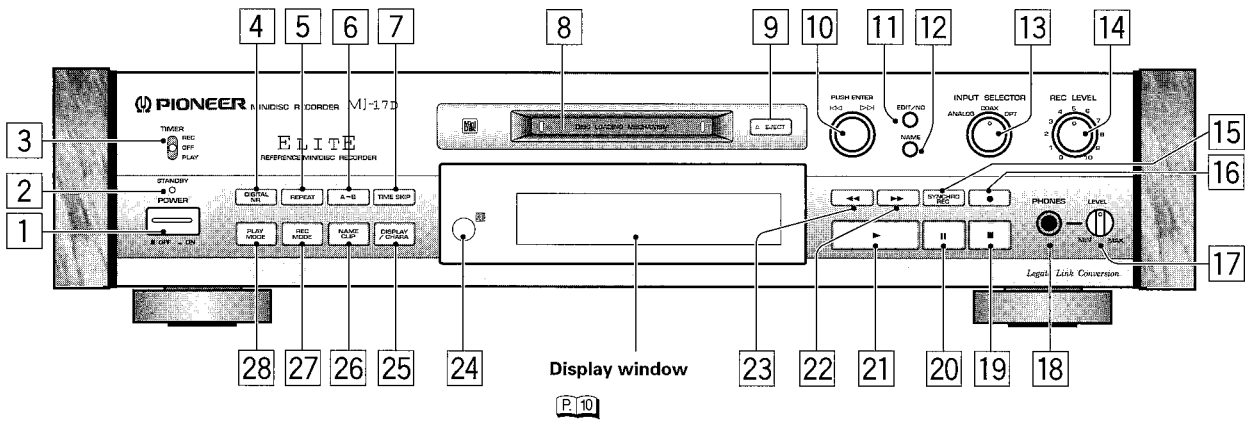
- When this unit is connected for system control, this unit cannot be controlled directly with the remote control unit.
- For further details, refer to the operating instructions of the equipment connected to this unit.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

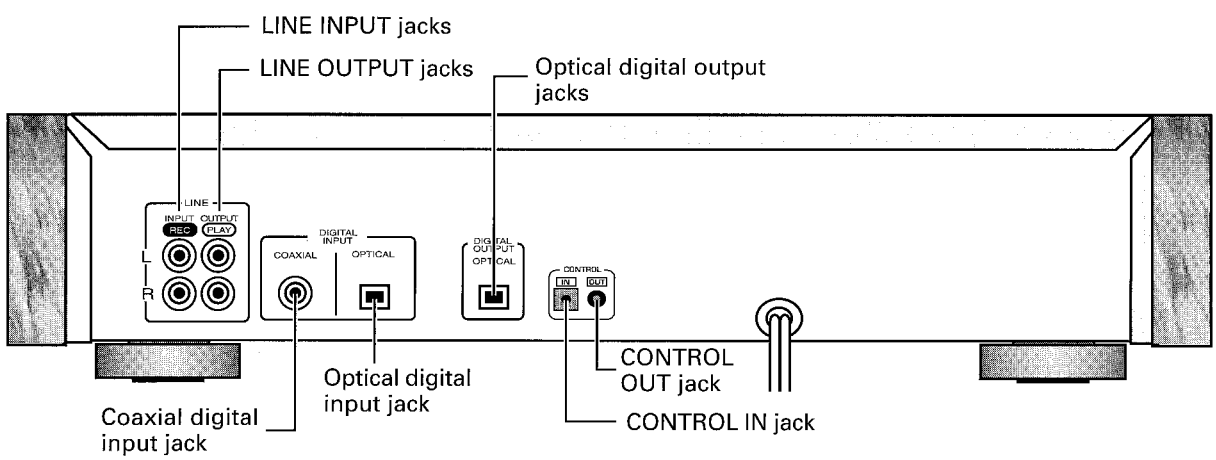
Names of Parts

Main unit front panel

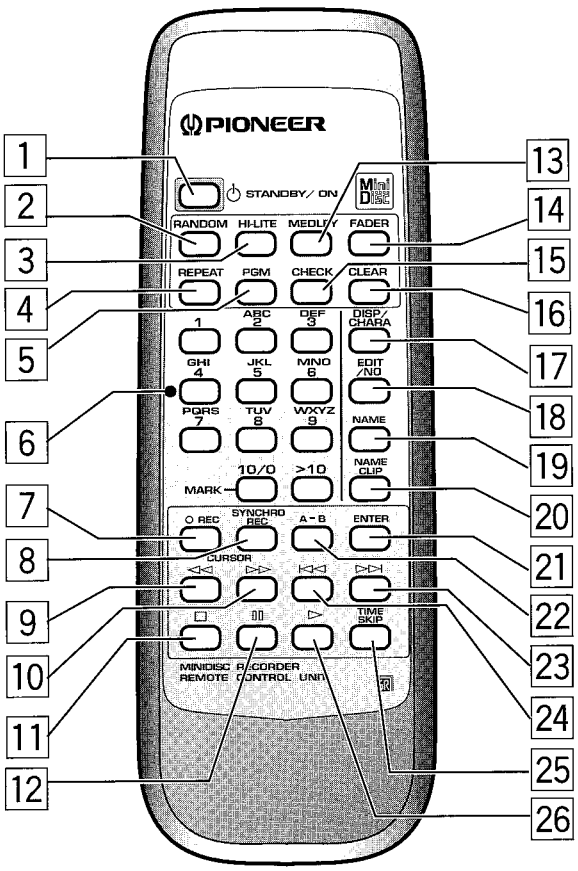


1 POWER switch
2 STANDBY indicator
3 TIMER switch P. 39
4 DIGITAL NR button P. 21 P. 25
5 REPEAT button P. 18
6 A-B button P. 18 P. 33 P. 37 P. 38
7 TIME SKIP button P. 15
8 MD insertion slot
9 MD eject (▲) button
10 Jog dial
11 EDIT/NO button P. 26 ~
12 NAME button P. 28 P. 29
13 INPUT SELECTOR switch P. 16
14 REC LEVEL control P. 17
15 SYNCHRO REC button P. 23
16 Record (●) button
17 Headphones volume control
18 PHONES jack
19 Stop (■) button
20 Pause (II) button
21 Play (►) button
22 Fast forward (►►) button
23 Fast reverse (◄◄) button
24 Remote control sensor
25 DISPLAY/CHARA button
26 NAME CLIP button P. 30
27 REC MODE button P. 16 ~
28 PLAY MODE button P. 20 ~

Main unit rear panel

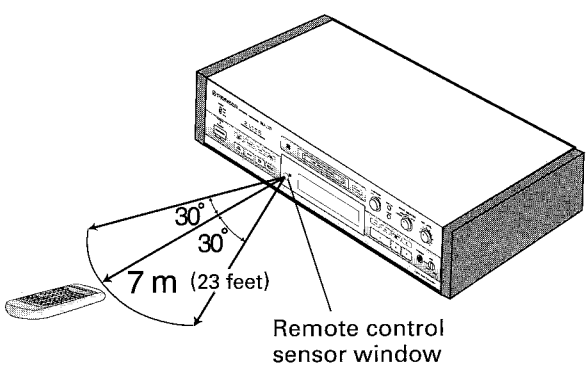


Remote control unit



1 STANDBY/ON switch
2 RANDOM button P.18
3 HI-LITE button P.20
4 REPEAT button P.18
5 PGM button P.20
6 Numeric buttons
7 REC (●) button
8 SYNCHRO REC button P.23
9 Fast reverse (◄◄) button
10 Fast forward (►►) button
11 Stop (■) button
12 Pause (II) button
13 MEDLEY button P.20
14 FADER button P.18 P.21 P.25
15 CHECK button P.19
16 CLEAR button P.19
17 DISP/CHARA button
18 EDIT/NO button P.26 ~
19 NAME button P.28 P.29
20 NAME CLIP button P.30
21 ENTER button
22 A-B button P.18 P.33 P.37 P.38
23 Skip (forward) (►►I) button
24 Skip (reverse) (I◄◄) button
25 TIME SKIP button P.15
26 Play (►) button

RANGE OF REMOTE CONTROL



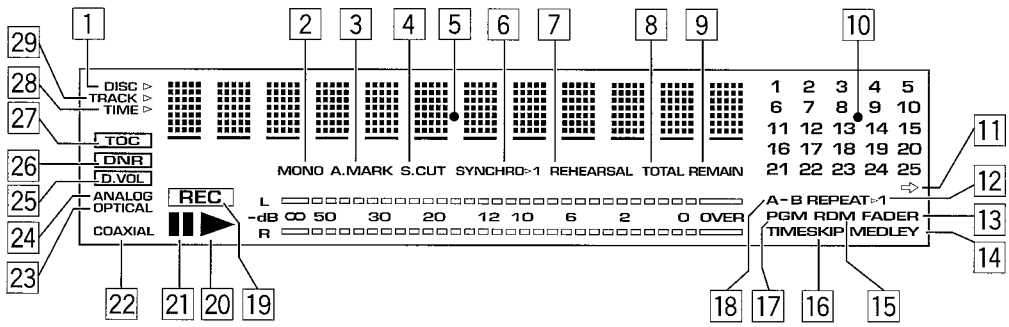
When the remote control unit is pointed at the remote sensor window on the stereo amplifier and any of its buttons is pressed, the unit and other components can be operated by remote control.

Distance :Within a range of approx. 7 meters (23 feet) from the unit's remote control sensor window.

Angle : Within approx. 30 degrees from the center of the unit's remote control sensor window.

Remote control will not be possible if there is an obstacle between the remote control unit itself and the unit's remote control sensor window.

Display window



1 Indicate that disc data as shown in the display has been selected.
2 Indicates long-hour recording in monaural.
3 Indicates that the auto mark function is set.
4 Indicates that the space cut function is active.
5 Shows a function or disc/track name.
6 Indicates sync recording.
7 Indicates the editing setting fine-adjustment mode.
8 Indicates that the total play time of the disc is displayed.
9 Shows the remaining time for playback or recording.
10 The indicators corresponding to the track numbers existing in the disc light up.
11 Indicates that the disc has more than 26 tracks.
12 Indicates the repeat play mode.
13 Indicates the fade play mode.
14 Indicates the medley play mode.
15 Indicates the random play mode.
16 Indicates that the time skip function is active.
17 Indicates the program play mode.
18 Indicates that 2 points, A and B, have been selected to set a section.
19 Indicates the record mode.
20 Indicates the play mode.
21 Indicates the pause mode.
22 Indicates digital input recording of the coaxial input.
23 Indicates digital input recording of an optical input.
24 Indicates analog input recording.
25 Indicates that the digital volume control function is active.
26 Indicates that the digital NR function is active.
27 Indicates that recording or editing has been performed.
28 Indicates that time information is selected as shown in the display section.
29 Indicates that the track data as shown in the display has been selected.

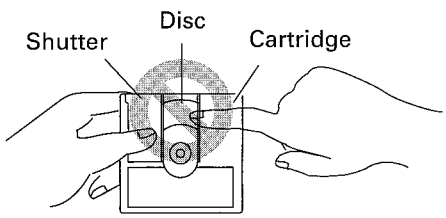
Message Shown on the Display	Description
No Disc	No disc has been loaded.
Loading	A disc is loading.
Eject	A disc is being ejected.
Blank Disc	The loaded disc is a blank disc.
Power On	The internal mechanism is being initialized.
Disc End	The end of disc is reached during playback .
TOC Reading	The TOC data is being read.
UTOC Writing	The UTOC data is being written.
Analog	The analog input is selected with the INPUT SELECTOR switch.
Coaxial	The coaxial digital input is selected with the INPUT SELECTOR switch.
Optical	The optical digital input is selected with the INPUT SELECTOR switch.
Name Over	The number of characters would exceed 100 if a name is copied using the name clip function.
Not Clipped	Copy using the name clip function is attempted while there is no name stored in memory.
Rehearsal	The rehearsal mode for fine-adjustment of settings is selected during editing.
Complete	An editing operation has been completed successfully.
Can't Edit	An editing operation has not been completed.

Basic Knowledge on MD

Handling the MD

■ **Use a disc carrying the marking shown on the right.**

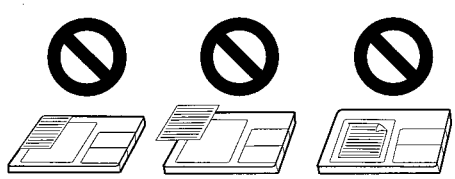
CAUTION!!
- Do not touch the disc directly.
- Do not force open the shutter, otherwise it will be damaged.
- Do not attempt to open the disc cartridge.



[Storage]
The disc cartridge should be stored in the case.
Do not store the disc case in the following places.
- where the temperature and humidity are high.
- where is subject to direct sunlight.
- where sand or dust may enter inside the unit.

[Maintenance of cartridge]
When the cartridge gets dirty or stained, wipe gently with a soft, dry cloth.

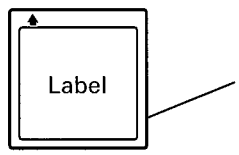
[Attaching the disc label]
Observe the following caution when attaching a disc label. Otherwise the MD would not be able to be exposed.
- Attach the label in the specified area.
- Do not attach a label on another label.
- When an attached label is separated or peeled off, remove it and replace with a new label.



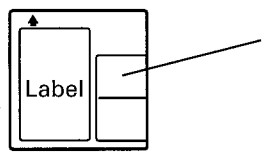
Types of MD

■ **Some discs are exclusively capable of playback and other discs are capable of both recording and playback.**

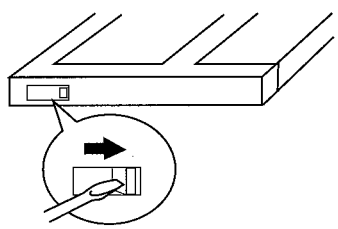
- Playback-only MD (Recording is not possible.)



- Recordable MD



To prevent accidental erasure of recorded MD
Slide open the accidental erasure protect tab on the edge to inhibit recording on a recordable MD.



Slide close the tab when you want to record or edit the MD.

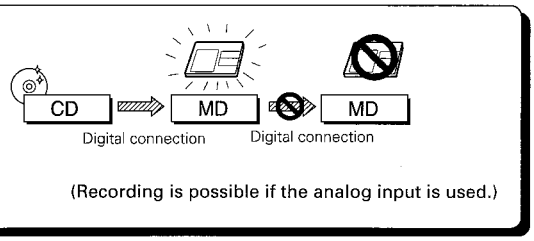
Recording is not available in the following cases.
- When you attempt to record a playback-only MD (usually used in prerecorded music software in the market).
- When the MD is protected against accidental erasure.
- When the MD has little remaining recording time.
- When "TOC Full" is displayed. P13 P40
- When the TOC is abnormal.

Do not switch the power off, unplug the power cord or apply impact on the unit during UTOC recording , P12 (while blinking "UTOC Writing" is displayed, P10). Otherwise the UTOC may not be recorded correctly and proper playback would be impossible later.

Caution on digital copy

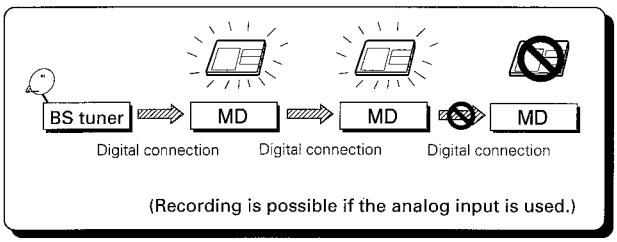
The second digital input recording (copy) from a digital-to-digital recorded source on another MD or DAT is not permitted. This is a restriction imposed by the SCMS (Serial Copy Management System).The SCMS (Serial Copy Management System) is a regulation that limits the number of digital signal copy operations in terms of "number of generations". This number is variable depending on sources, but at least one generation of digital copy from the original source is possible with any source.

1. The digital signal from a copyrighted CD or DAT music tape can be copied digitally for only one generation.



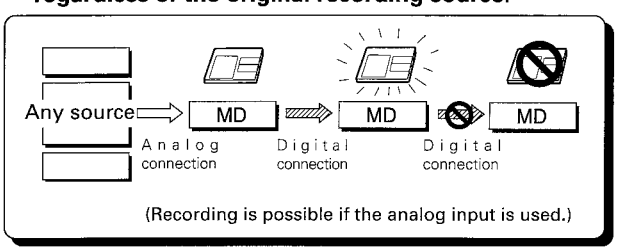
(Recording is possible if the analog input is used.)

2. The digital signal received from satellite broadcasting can be copied digitally for up to two genera



(Recording is possible if the analog input is used.)

3. A digital recording obtained by recording an analog input can be copied digitally for only one generation regardless of the original recording source.



(Recording is possible if the analog input is used.)

Note

After completing recording, be sure to eject the disc (because the UTOC is written during disc ejection) before turning the power off.

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TOC and UTOC

The MD contains the recording of data on the disc or its tracks, including the number of tracks, their playing time and track names. This data is referred to as the TOC (Table Of Contents). Particularly, the TOC which can be rewritten is called the UTOC (User Table Of Contents). This MD recorder rewrites the UTOC when the disc is ejected or the MD recorder is switched to the STANDBY mode from the remote control unit. The display shows "UTOC Writing" during the UTOC rewriting operation.

About digital input recording

The sampling frequency used in the recording of the MJ-17D is 44.1 kHz. But it can record digital signals from source components based on other sampling frequencies (BS/CS tuners, DVD recorders, some DAT recorders) provided that their sampling frequencies are 32 kHz or 48 kHz. However, if digital copy of the source is prohibited like in case of a DVD recorder, digital input recording is not available even when the sampling frequency can be converted. Also note that the MJ-17D cannot convert the 96 kHz sampling frequency. In these cases, record the analog output from the source.

Differences between MD recording and tape recording

- An MD can be recorded only on one side.
- An MD is recorded by searching a space where recording is possible automatically.
- The remaining recording time available in an MD can be confirmed before starting recording.

About track numbers

One or more track number is assigned automatically in every recording. The track number is incremented in subsequent additional recording.

Track number assignment in digital input recording

- During recording from CD or MD, a track number is assigned automatically in each point where a track number is recorded in the CD or MD.
  When digitally recording a CD or MD, track numbers may not correspond to the original track numbers.
- During digital input recording from an external source (other than CD and MD), auto marking can be used in the same way as during analog input recording.

Track number assignment in analog input recording

- Auto marking can be used. However, in this case, note that track numbers may not always be assigned to correct position due to noise, etc.

In case of power failure during recording

If the MD recorder is turned off accidentally, the power cord is unplugged or a power failure occurs during recording on a blank MD, immediately turn power ON. If the MD recorder is left for about a week after such an accidental power failure, the entire data in the disc will be lost.
If the above occurs during additional recording onto a previously-recorded MD, the additional data will be lost.

This unit can store the following information in memory:

- Digital input volume level setting P.16
- Program play order P.19
- Timer playback with fade-in P.21
- Digital NR setting P.21 P.25
- Auto mark operation level setting P.23
- Stereo/monaural recording switch setting P.24

To return stored settings to their initial values (factory settings), press the PLAY MODE button while pressing the stop (■) button.

MD system restrictions

The MD is recorded in a different format from compact cassettes and DAT tapes. As a result, symptoms as described below may be observed depending on the way you record or edit the MD.
Remember that these symptoms are due to the system restrictions and not malfunctions.

Symptom	System Restriction
"TOC Full" is displayed before the maximum number of MD tracks (254 tracks) is reached.	The partitions between recordings in an MD are registered in the UTOC. After repeated recording and editing operations involving partial erasure, the UTOC data may become full before the maximum number of tracks (254 tracks) is reached. In this case, no more recording will be possible. (Such an MD can be made available for recording after performing the 1-track or all-track erase operation.)
"Disc Full" is displayed before the maximum recording time of the MD is reached.	When the disc is scratched or otherwise damaged, that section becomes automatically unavailable for recording so the total recording time is reduced.
The remaining recording time cannot be increased after erasing some short tracks.	The remaining recording time information may sometimes not count the time of shorter tracks than 12 seconds.
The total of the recorded time and remaining recording time of an MD does not match the maximum recording time of the MD.	The minimum unit of recording is usually a cluster (about 2 seconds), but shorter data than a cluster also spends a space of about 2 seconds. As a result, the actually available recording time may be shorter than the displayed remaining time. In addition, if the disc is scratched or otherwise damaged, that section becomes automatically unavailable for recording so the total recording time is reduced further. (In this case, "Defect" is displayed during recording and the MD track number is incremented automatically.)
It is sometimes impossible to combine tracks during editing.	The combine function may sometimes be unavailable with an MD which experienced repeated recording or editing. Tracks cannot be combined neither in the following cases: ● When a track was recorded from a digital input (from a CD or MD) while the other was recorded from an analog input. ● When a track was recorded in stereo while the other was recorded in long-hour monaural recording.
Sound is interrupted during fast forward or reverse of a recorded track.	With an MD which experienced repeated recording or editing, the sound may be interrupted during fast forward or reverse.

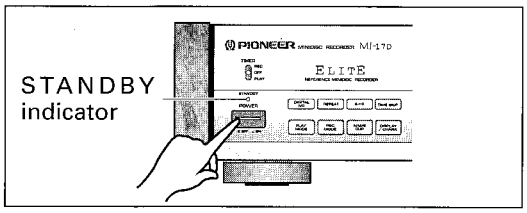
Simple Playback and Recording

Playing an MD

1 Turn power ON.

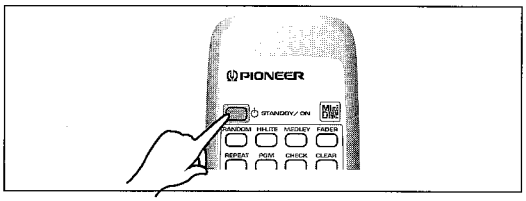
- When the STANDBY indicator is not lit:

  Press the POWER switch on the main unit.



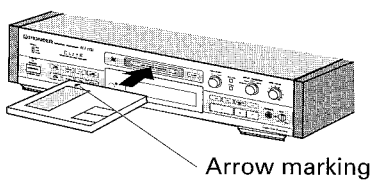
- When the STANDBY indicator is lit:

  Press the STANDBY/ON switch on the remote control unit.



2 Load an MD.

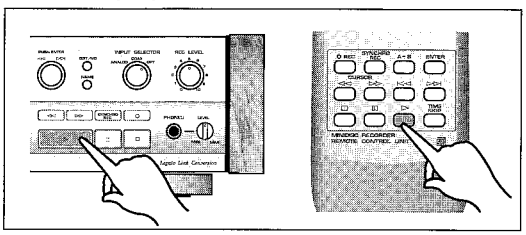
Hold an MD horizontally with the label side up and insert gently in the direction of the arrow. The MD will be pulled in automatically from the middle.
If "Blank MD" is displayed, eject the MD and use another MD. P 40



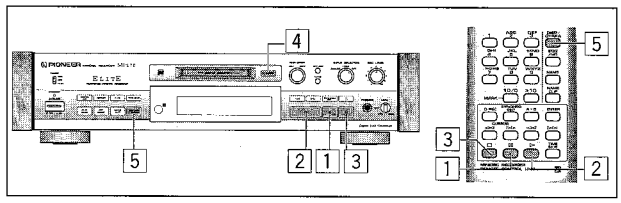
A disc will not be accepted if you load it immediately after switching power ON. Load a disc after "No Disc" is displayed.

3 Start playback.

Press the play (►) button.



- When a playback-only MD or a recordable MD containing the track name data is loaded, the track name is displayed by scrolling. (A name composed of no more than 11 characters is not scrolled.)
  "No Name" is displayed if the MD does not contain name data.



1 To let playback pause temporarily

Press the pause (II) button during playback.

2 To cancel pause

Press the play (►) or pause (II) button.

3 To stop playback

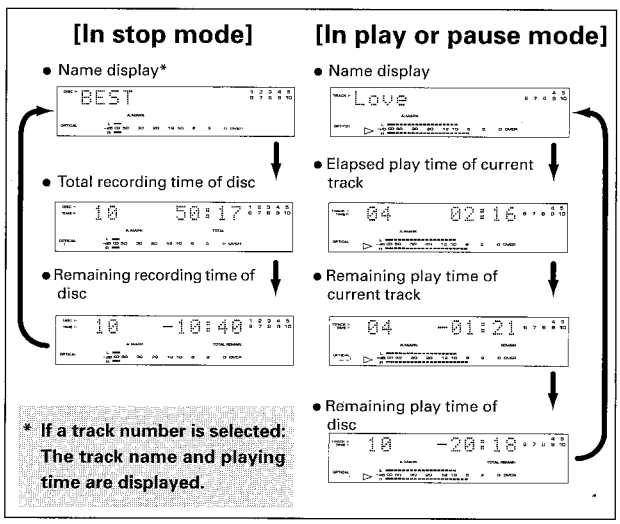
Press the stop (■) button.

4 To eject the disc

Press the MD eject (⏏) button.

5 To switch the displayed information

Press the DISPLAY/CHARA button. Each press switches the information as shown below.


[In stop mode]
[In play or pause mode]
• Name display*
• Total recording time of disc
• Remaining recording time of disc
* If a track number is selected: The track name and playing time are displayed.
• Name display
• Elapsed play time of current track
• Remaining play time of current track
• Remaining play time of disc

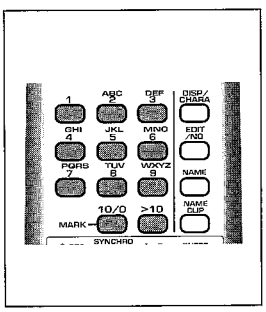
MEMO

Difference between the POWER switch on the main unit and the STANDBY/ON switch on the remote control unit

To turn off the power supply to the MJ-17D, use the POWER switch on the main unit. When the STANDBY/ON switch on the remote control unit is pressed while the power is ON, the STANDBY indicator on the main unit remains lit and the power supply to the main unit is not completely shut off. In this condition, the power can be turned ON using the STANDBY/ON switch on the remote control unit. While the STANDBY indicator is lit, the power can be turned ON automatically by simply inserting an MD.

Selecting the desired track (Direct track selection)

Playback can be started from a desired track by simply selecting its track number on the remote control unit.



Example: To play track No. 8
(or a track with a 1-digit number)

TUV 8

(Press the numeric key of the track number to start playback.)

Example: To play track No. 16
(or a track with a 2-digit number)

>10 ⇨ 1 ⇨ MNO 6

Compose the track number by pressing numeric keys in sequence to start playback.

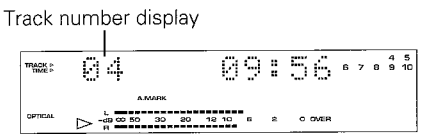
Example: To play track No. 168
(or a track with a 3-digit number)

>10 ⇨ >10 ⇨ 1 ⇨ MNO 6 ⇨ TUV 8

Compose the track number by pressing numeric keys in sequence to start playback.

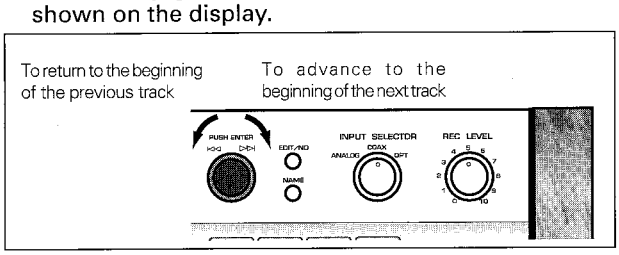
Skipping to the beginning of a track

The beginning of a desired track can be located while observing the track number display.



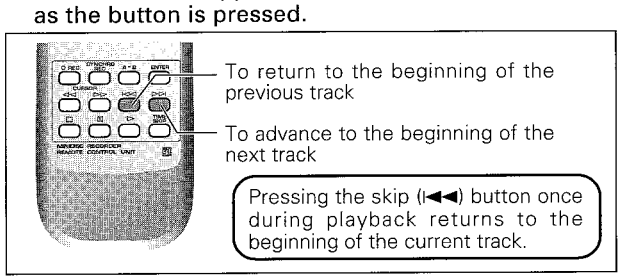
■ Main unit operation

Rotate the jog dial while observing the track number shown on the display.



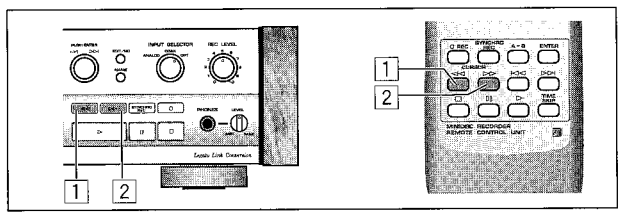
■ Remote control operation

Press the skip (|◄◄ or ►►|) button while observing the track number shown on the main unit display. Tracks can be skipped for the same number of times as the button is pressed.


To return to the beginning of the previous track
To advance to the beginning of the next track
Pressing the skip (|◄◄) button once during playback returns to the beginning of the current track.

Searching the disc by fast forward or fast reverse

The fast forward or fast reverse operation is possible while listening to the playback. This is convenient for searching a desired point in a track.



1 To fast reverse the disc

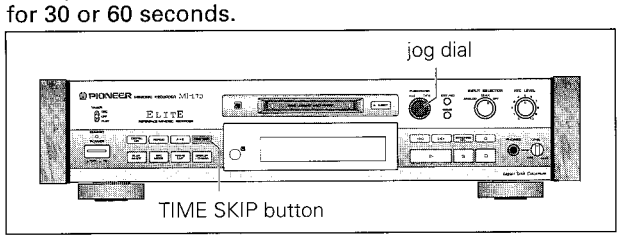
Press and hold the Fast reverse (◄◄) button during playback.

2 To fast forward the disc

Press and hold the Fast forward (►►) button during playback.

Search at an even higher speed (Time skipping)

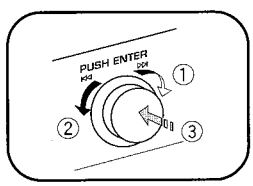
The position in a track can be skipped either by 30 or 60 seconds. The time skip function can for example be used to skip recorded commercials which are often broadcast for 30 or 60 seconds.



1 Press the TIME SKIP button during playback or pause.

"TIME SKIP" lights on the main unit display. Time skipping cannot be activated during random playback or program playback.

2 Turn the jog dial.



Turning the jog dial in direction ① skips 30 (or 60) seconds of recording.

Turning the jog dial in direction ② skips 30 (or 60) seconds of recording.

The skipped time period can be changed to 60 seconds by pushing the jog dial in direction ③ before turning it.
Pushing the jog dial also changes the displayed skip period from 30 to 60 seconds.

■ To cancel time skipping

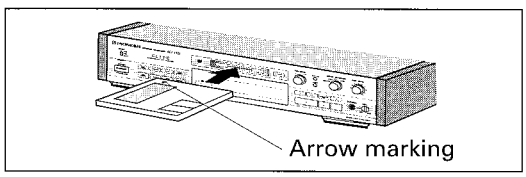
Press the TIME SKIP button again.

Digital input recording on MD

Additional recording on an MD is appended automatically to the end of the existing recording. This means that the end of the existing recording does not have to be searched like with a cassette tape.

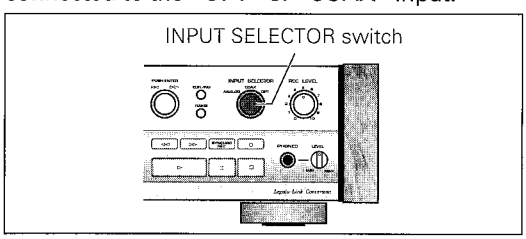
❶ Load a recordable MD.

Hold an MD horizontally with the label side up and insert gently in the direction of the arrow. The MD will be pulled in automatically from the middle.



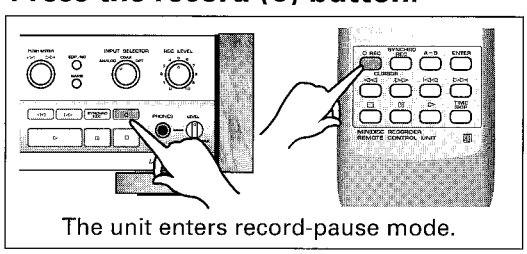
❷ Using the INPUT SELECTOR switch, select the input where the recording source component is connected.

For digital input recording, select the component connected to the "OPT" or "COAX" input.



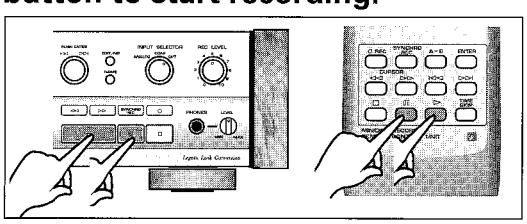
If "MONO" is lit on the display, the recording will be long-hour monaural recording. See P 23 if you want stereo recording.

❸ Press the record (●) button.



The unit enters record-pause mode.

❹ Press the play (►) or pause (II) button to start recording.



❺ Start playing the source component connected to the jack selected with the INPUT SELECTOR switch.

❻ To stop recording:

Press the stop (■) button.

■ To switch the displayed information

See the procedure described in "Analog input recording on MD" on page 17.

■ To control the digital input level (Digital record volume)

With digital input recording, it is usually not required to adjust the digital input level. But this unit has been designed to allow digital input level adjustment in steps ❸ and ❹.
Be sure to use the following procedure if you want to adjust the digital input level. Note that the REC LEVEL control cannot be used.

1 Press the REC MODE button.

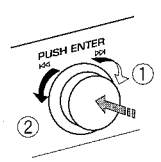
If an MD is loaded, digital input volume level can be set even when the unit is in the Stop mode. "Digital vol." is shown on the main unit display.

2 Push the jog dial.

The display changed to "D.vol dB".

3 Turn the jog dial to vary the digital input level.

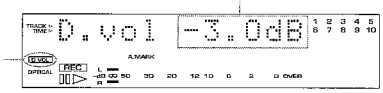
The control range is between +12 dB and 0 dB and -48 dB. (The initial value is 0 dB.)



Turning the jog dial in direction ① increases the digital input level.
Turning the jog dial in direction ② decreases the digital input level.

The digital input level is displayed as shown below.

Lights.



CAUTION:
The digital input level control is available only when the sampling frequency of the input is 44.1 kHz. Once the digital input level has been controlled, the setting memory is backed up even after the power is turned OFF.

4 Push the jog dial after the adjustment.

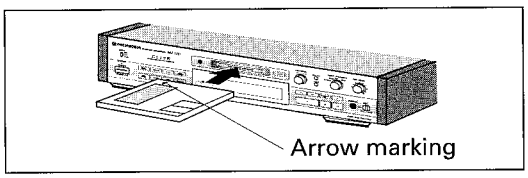
When the volume is set to other value than the initial value of 0 dB, the D.VOL indicator lights up on the main unit display.

Analog input recording on MD

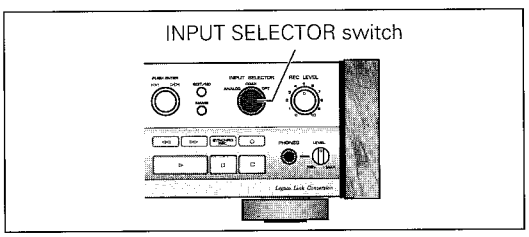
Additional recording on an MD is appended automatically to the end of the existing recording. This means that the end of the existing recording does not have to be searched like with a cassette tape.

1 Load a recordable MD.

Hold an MD horizontally with the label side up and insert gently in the direction of the arrow. The MD will be pulled in automatically from the middle.

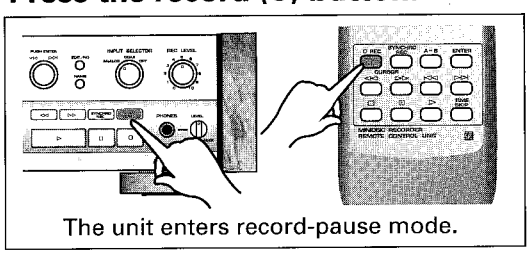


2 Select the "ANALOG" input with the INPUT SELECTOR switch.



If "MONO" is lit on the display, the recording will be long-hour monaural recording. See P.23 if you want stereo recording.

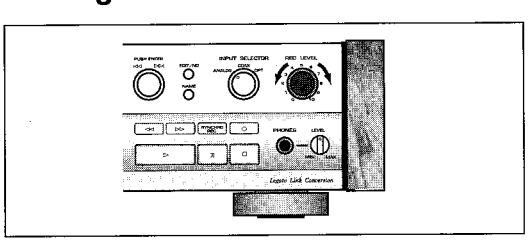
3 Press the record (●) button.



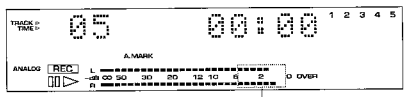
The unit enters record-pause mode.

4 To adjust the recording level, play the source component connected to the analog audio input jacks.

5 Adjust the recording level by turning the REC LEVEL control.



Adjust so that this section lights at the peak level of the sound.

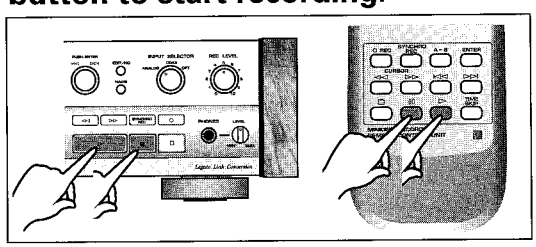


Do not adjust so that " OVER " (red segment) lights.

6 Stop playing the source component connected to the analog audio input jacks.

Search the beginning of the music to be recorded.

7 Press the play (►) or pause (II) button to start recording.



8 To start recording, play the source component connected to the analog audio input jacks.

9 To stop recording:

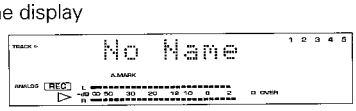
Press the stop (■) button.

■ To switch the displayed information

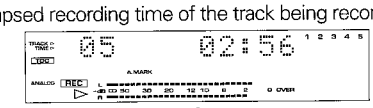
Press the DISPLAY/CHARA button. Each press switches the information as shown below.

[In play or pause mode]

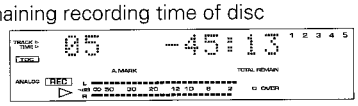
- Name display



- Elapsed recording time of the track being recorded



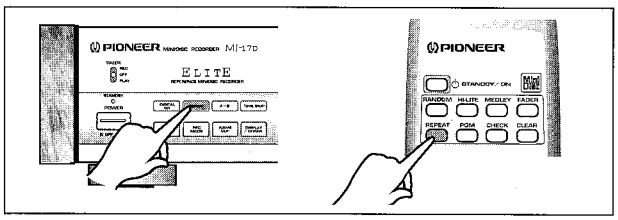
- Remaining recording time of disc



Advanced Playback Features

Playing track(s) repeatedly (Repeat playback)

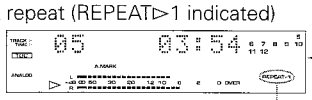
A single track or all tracks in a disc can be played repeatedly. A section between two arbitrarily selected points can also be repeated.



Press the REPEAT button.

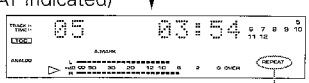
Each press switches the repeat mode as shown below.

- 1-track repeat (REPEAT▷1 indicated)



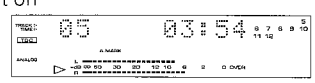
- All-track repeat (REPEAT indicated)

Lights.



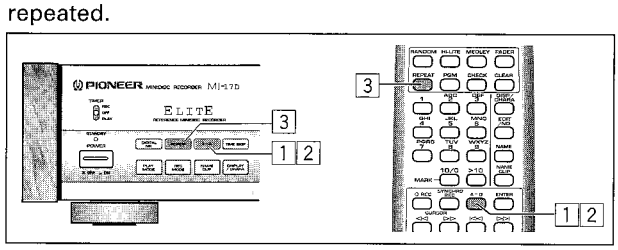
Lights.

- Repeat off



■ Repeating a section between two points

Select start point A and end point B of the section to be repeated.



1 Set start point A.

While listening to playback, press the A-B button at the point you want to start the repeat play.

2 Set end point B.

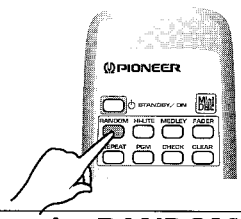
While listening to playback, press the A-B button at the point you want to end the repeat play.

3 Press the REPEAT button.

- Pressing the REPEAT button again cancels the repeat mode and starts normal playback from the beginning of the current track.
- The A and B settings are canceled automatically when playback is stopped.

Playing tracks in a random order (Random playback)

The tracks in an MD can be played in a random order until all of them have been played.



* The operation is available only from the remote control unit.

Press the RANDOM button during playback or stop.

"RDM" lights on the main unit display and random playback starts.

- The random play mode is canceled when playback is stopped.
- When the REPEAT button is pressed during random playback, the random playback will be repeated.
- When the MEDLEY button is pressed during random playback, the random playback will be canceled and medley playback starts.

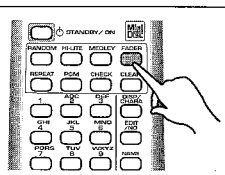
Beginning and ending playback by gradual level increase or decrease (Fade-in and fade-out)

Fade-in refers to beginning a track by gradually increasing the volume from a low level, and fade-out refers to ending a track by gradually decreasing the volume. The MJ-D7 can apply fade-in and fade-out as desired during playback. The time taken for fade-out and fade-out is about 5 seconds.

■ To begin playback with fade-in

Press the FADER button during pause.

"FADER" starts to blink in the main unit display and playback restarts with fade-in from the position where playback has paused.

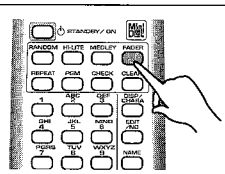


* The operation is available only from the remote control unit.

■ To end playback with fade-out

Press the FADER button during playback.

"FADER" starts to blink in the main unit display and playback pauses after fade-out.

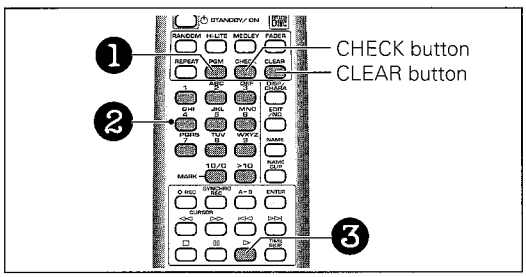


* The operation is available only from the remote control unit.

Playing desired tracks in desired order (Program playback)

The desired tracks can be selected from an MD and played in the desired order.

■ The operation is available from the remote control unit.



1 Press the PGM button during stop.

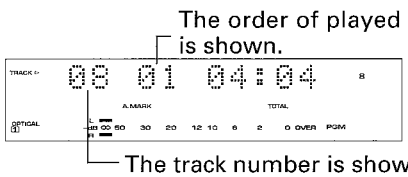
2 Select the track numbers in the order you want to play them later.

Up to 30 tracks can be programmed. "PGM Full" is shown on the main unit display when you attempt to program a 31st track.

■ Programming using the numeric buttons

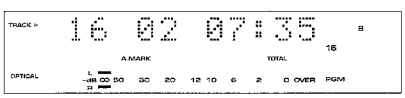
- To program track No. 8 (or a track with a 1-digit number)

TUV 8 — Simply press the numeric key of the track number.



- To program track No. 16 (or a track with a 2-digit number)

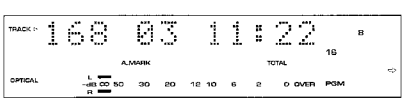
>10 ⇨ 1 ⇨ MNO 6 — Press numeric keys in sequence.



- To play track No. 168 (or a track with a 3-digit number)

>10 ⇨ >10 ⇨ 1 ⇨ MNO 6 ⇨ TUV 8

Press numeric keys in sequence.

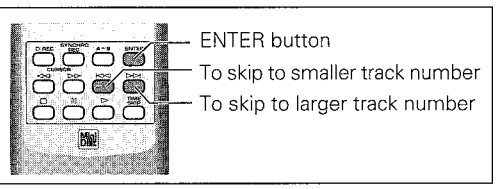


As the tracks are programmed in the order they are selected, they are played in the order they have been selected.

■ Programming using the skip buttons

While observing the track number shown on the main unit display, select each track number by pressing the I◄◄ or ►►I button and press the PGM or ENTER button.

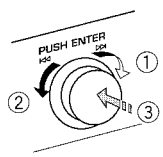
- Select a track number, and...



- program it.

Press ENTER or PGM .

Track numbers can also be programmed using the jog dial on the main unit.



Turning the jog dial in direction ① selects a larger track number.
Turning the jog dial in direction ② selects a smaller track number.
Push the jog dial in direction ③ to program the track.

3 Press the play (►) button to start programmed playback.

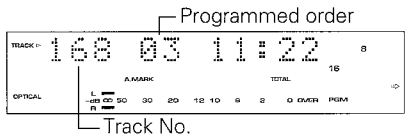
- Pressing the REPEAT button during program playback repeats the program playback (program repeat).

■ To cancel the program

- To cancel all tracks in the entire program
  Press the stop (■) button during stop.
  Then press the MD eject (⏏) button.
- To cancel a track in the program
  Each press of the CLEAR button during stop cancels the last programmed track from the program.

■ To check the programmed tracks

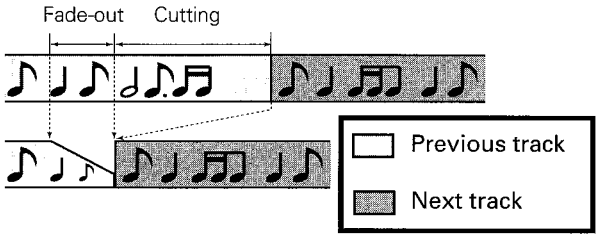
Press the CHECK button during stop to display the programmed track numbers in the order they were programmed.



Once tracks have been programmed, the program memory is backed up even after the power is turned OFF.

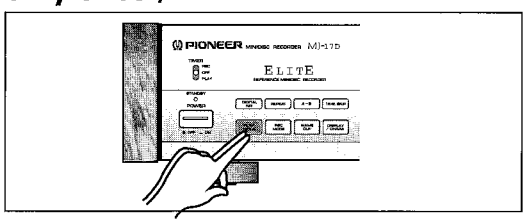
Playing all tracks in an MD continuously (Medley playback)

All tracks in a disc can be played without a blank as if they form a single piece of music. This is made possible by fading out and cutting the ending section (last 10 seconds) of each track before starting the next track.

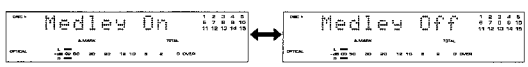


■ Main unit operation

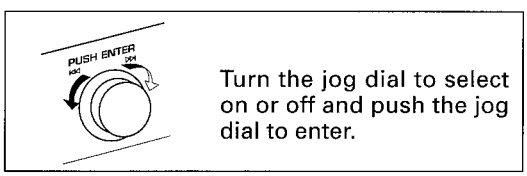
1 During stop, press the PLAY MODE button twice. (If the current mode is play mode, press the button only once.)



2 Turn the jog dial to switch the medley playback on and off.



When the medley playback is on When the medley playback is off

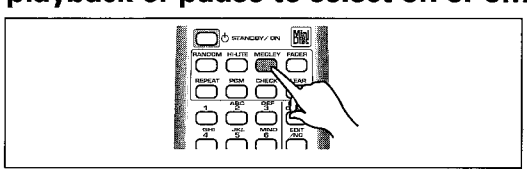


Turn the jog dial to select on or off and push the jog dial to enter.

3 Press the play (►) button to start playback.

■ Remote control operation

Press the MEDLEY button during playback or pause to select on or off.



■ To cancel medley playback

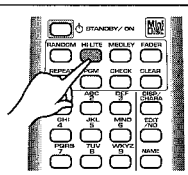
In step ❷, select off with the jog dial.
To cancel medley playback in the middle, press the TIME SKIP button to cancel it and start normal playback.

Quickly locating desired music in a MD (Highlight Scan)

The section of about 10 seconds after the beginning of every track in a disc can be played in sequence. This allows you to locate the desired music from a disc quickly.

Press the HI-LITE button during play or stop.

The "Hi-Lite" indicator lights on the main unit display and Highlight Scan starts.



* The operation is available only from the remote control unit.

When the track you want to play entirely starts, press the play button. Highlight Scan is canceled and normal playback starts from the beginning of the track.

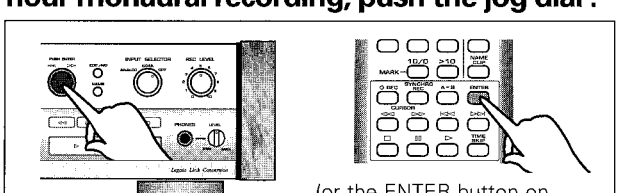
Note

- *If a track is shorter than 1 minute, the 10-second section from its beginning is played. If a track is shorter than 10 seconds, it is played from the beginning to the end.*
- *When Highlight Scan is started in the middle of program playback or random playback, the program or random playback is canceled together with the current program data.*
- *Repeat is not possible during highlight scan.*

Double-speed playback

An MD recorded with long-hour monaural recording can be played at the double speed.The double-speed playback is not available during random playback, Highlight Scan, medley playback or repeat playback.

During playback of a disc recorded with long-hour monaural recording, push the jog dial .



(or the ENTER button on the remote control unit)

■ To let double-speed playback pause temporarily

Press the pause (II) button during playback. Press the button again to resume the double-speed playback.

■ To restart normal playback

Push the jog dial (or the ENTER button on the remote control unit).

Note

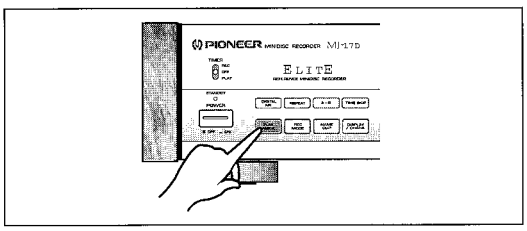
- *When a track recorded in stereo is encountered during double-speed playback, the double speed playback is canceled. It is also canceled when the HI LITE, RANDOM, MEDLEY or REPEAT button is pressed.*
- *The double-speed playback may be hard to be understood depending on the contents.*

Timer playback with fade-in

Timer playback for starting playback at the desired time of the day using a commercially available timer P.39 can be started increasing the volume gradually from a low level (fade-in playback).

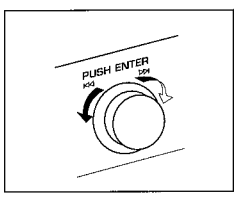
■ Main unit operation

1 Load a disc and press the PLAY MODE button once during stop.



2 Switch the fade-in on.

Turn the jog dial to select "on" then push the dial to enter the selection. "FADER" is displayed to indicate the fade-in play mode.



- Display when fade-in play is on

- Display when fade-in play is off

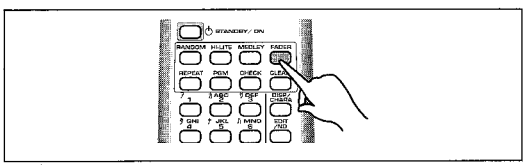
To abort operation, press the stop (■) button in this step.

3 Set the timer.

■ Remote control unit operation

1 Press the FADER button during stop.

"FADER" is displayed to indicate the fade-in play mode.

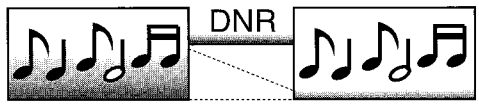


To cancel fade-in playback, press the FADER button again.

2 Set the timer.

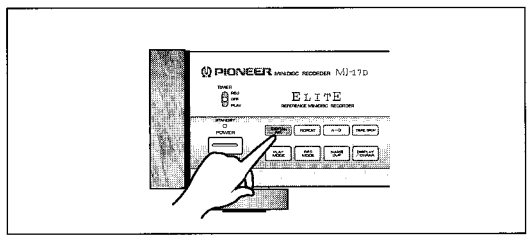
Playback with reduced noise (Digital NR)

The Digital NR function makes it possible to reduce the audible noise during playback.



1 Press the DIGITAL NR button.

The DNR indicator lights on the main unit display.



2 To cancel the Digital NR

Press the DIGITAL NR button again. The DNR indicator disappears from the main unit display.

Note

Even when Digital NR is used, the noise may not be reduced in the following cases.

- *When the noise is transient.*
- *When the noise is extremely large.*
- *When the frequency range of the input source is low, for example with AM broadcasting.*

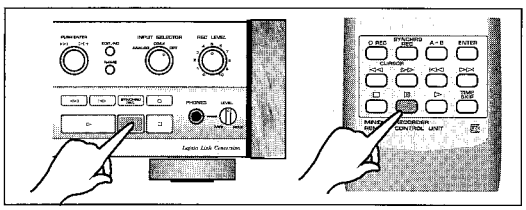
Advanced Recording Features

Starting recording from the middle of existing recording

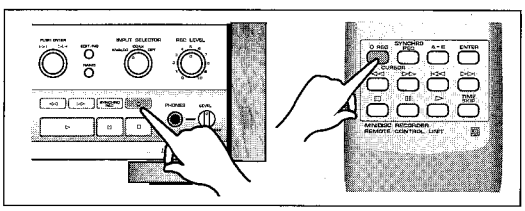
Additional recording can be started from the desired point in the middle of existing recording. In this operation, new data overwrites the existing data after the point where additional recording starts. Note that, unlike cassette tapes, all the existing tracks after the point where additional recording starts are lost.

1 Press the pause (II) button during playback.

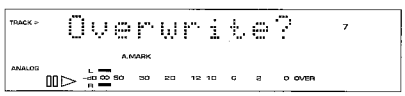
While listening to playback, press the pause button when the point where you want to start additional recording.



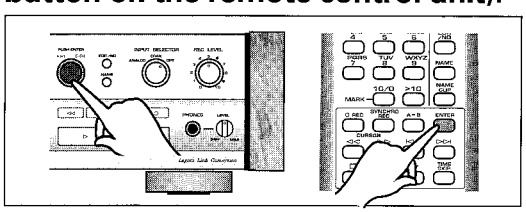
2 Press the record (●) button.



The overwrite confirmation is displayed.

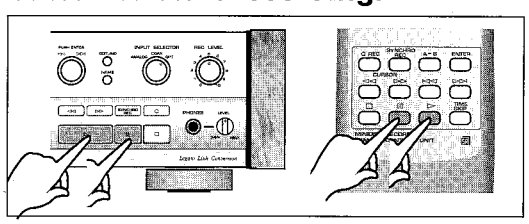


3 Push the jog dial (or the ENTER button on the remote control unit).



If you want to cancel recording now, press the stop (■) button in place of the jog dial or ENTER button.

4 Press the play (►) or pause (II) button to start recording.



Recovery recording for starting recording from 2 seconds before

The usual procedure for MD recording consists of:

1 Pressing the record (●) button to enter record-pause mode.

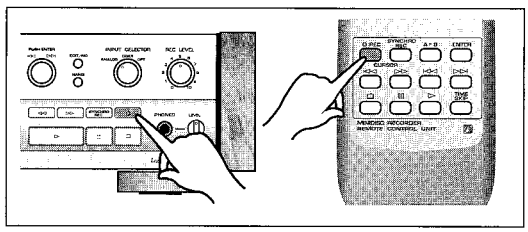
2 Pressing the play (►) or pause (II) button to start recording.

However, when the recovery recording is used, recording starts from 2 seconds before the start of recording (step 2). This prevents the beginning of music from being missed from recording due to delay in operation.

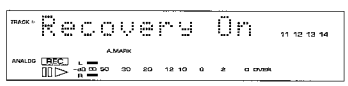
When recording music off the air, you will not miss the beginning of the music if you start the recovery recording within 2 seconds after the start of music.

■ To start recovery recording

1 Press the record (●) button twice.



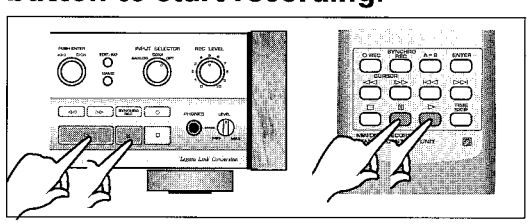
The unit enters the recovery record-pause mode. The recovery recording and normal recording are alternated every time the record (●) button is pressed now.



Display when the recovery recording is on.

Display when the recovery recording is off (normal recording).

2 Press the play (►) or pause (II) button to start recording.



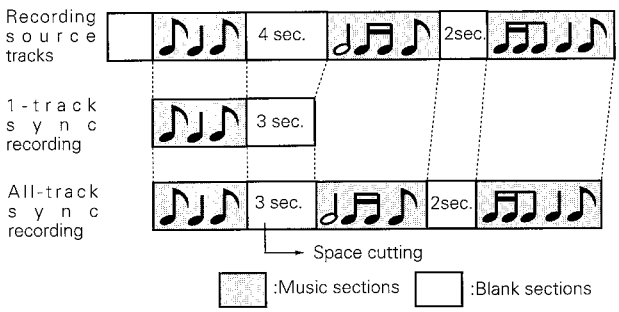
■ To cancel recovery recording

Press the stop (■) button.

(If you press the pause (II) button, the recording resumed after pause with recovery recording again.)

Starting recording upon detection of actual input signal (Sync recording)

The sync recording starts or pauses recording automatically by detecting the level of the input from the recording source .
The 1-track sync recording which records only one track automatically and stops recording when the track finishes, and the all-track sync recording which repeats sync recording for all tracks in the disc are available.
If the input level remains under the sync operation level for more than 3 seconds during all-track sync recording, the recording pauses and resumes whenever the input level increases above the sync operation level. (Space cutting)
When performing Synchro Recording with this unit, if you pause recording for longer than about 30 minutes, the unit switches to the Stop mode to protect the MD.



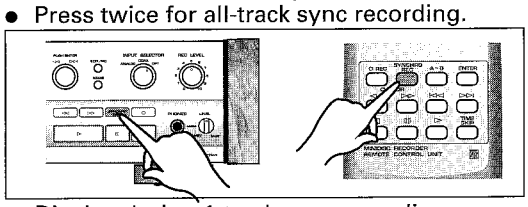
■ Sync recording procedure

❶ Make preparation for recording.

- For digital input recording, follow steps ❶ and ❷ on page 16.
- For analog input recording, follow steps ❶ to ❻ on page 17.

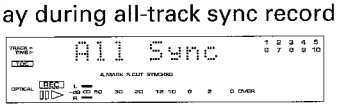
❷ Press the SYNCHRO REC button.

- Press once for 1-track sync recording.
- Press twice for all-track sync recording.



- Display during 1-track sync recording

- Display during all-track sync recording.



Each press of the SYNCHRO REC button switches 1-track sync recording and all-track sync recording alternately.

❸ Start playing the source component to be recorded.

Recording starts automatically.

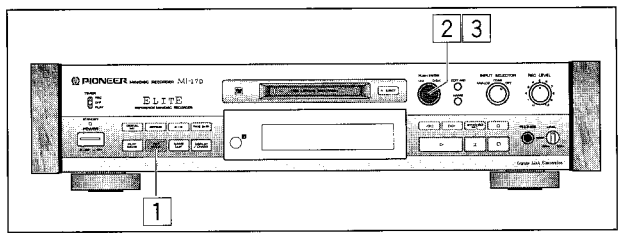
■ To cancel sync recording

Press the stop (■) button.

Assigning track numbers (Auto marking)

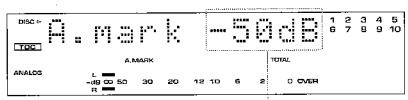
During digital input recording of other digital source than a CD or MD as well as during analog input recording, when the source being recorded has a non-recorded blank of more than 1.5 seconds, the blank is regarded as a blank between tracks and a new track number is assigned. This function is referred to as auto marking.
With this unit, the level at which auto marking occurs can be switched over.

■ Switching the auto marking level (the level at which a blank is identified)



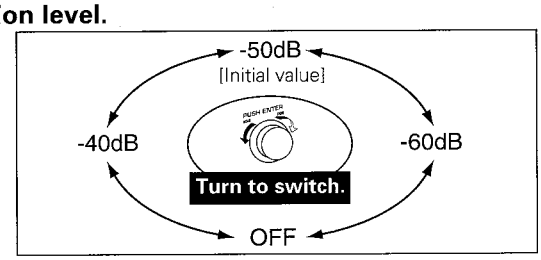
1 With the disc loaded and the MD recorder in stop mode, press the record mode button three times.

The blank detection level selection screen appears.



Indicates the blank detection level of auto marking.

2 Turn the jog dial to select the blank detection level.



3 Push the jog dial.

- When the figure after the minus sign is large, auto marking is activated at a lower volume level.
- Setting the blank detection level to "OFF" results in recording every recording session as a single track and defeats the auto marking function.
- "OFF" cannot be selected while sync recording is activated.

■ Assigning track numbers manually during recording

You can also mark track numbers in desired points so you can locate them later.

When the point where your want to mark a track number comes during recording, press the record (●) button.

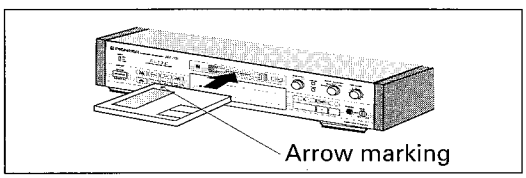
- You cannot assign track numbers by yourself during sync recording.

Long-hour monaural recording

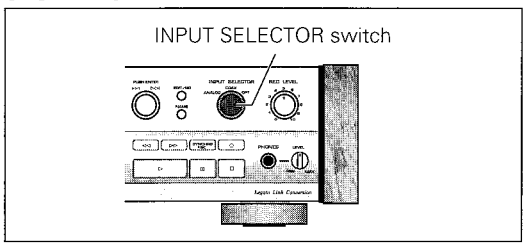
Recording using the long-hour monaural recording mode makes it possible to record for twice the period possible in the stereo recording mode. The long-hour monaural recording is therefore useful for recording monaural music or talk programs.
Either digital or analog input can be recorded in long-hour monaural recording.

1 Load a recordable MD.

Hold an MD horizontally with the label side up and insert gently in the direction of the arrow. The MD will be pulled in automatically from the middle.



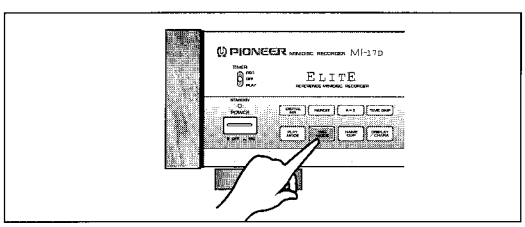
2 Select the input where the recording source component is connected, with the INPUT SELECTOR switch.



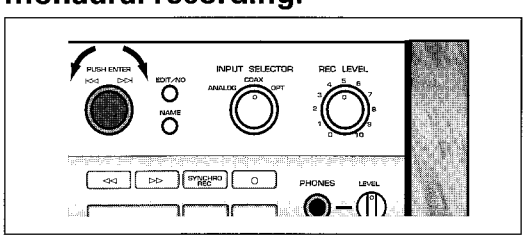
■ If you select "ANALOG" above

Adjust the recording level before starting recording. See P17 for the recording level adjustment procedure.

3 Press the REC MODE button twice.

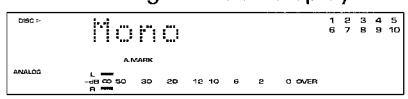


4 Turn the jog dial to select monaural recording.



Stereo recording selection display

Monaural recording selection display



Turn so that the monaural recording selection display appears.
(If you want stereo recording, turn the jog dial so that the stereo recording selection display appears.)

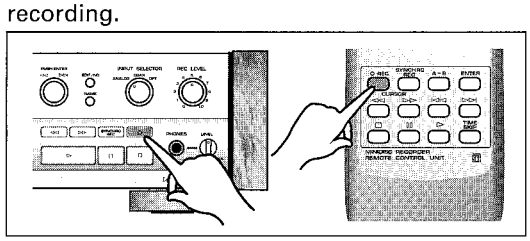
Note

It is not possible to switch between monaural and stereo recording in the middle of recording. If you want to switch from monaural to stereo or vice versa, let current recording pause or stop.

5 Push the jog dial.

6 Press the record (●) button.

This initiates record-pause mode of monaural recording.



7 Press the pause (►) or pause (II) button to start recording.

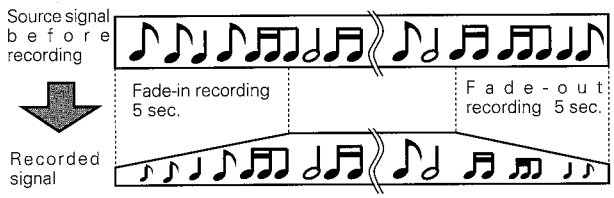
8 Start playing the source component connected to the input selected with the INPUT SELECTOR switch.

Note

Once long-hour monaural recording has been set, the memory is backed up even after the power is turned OFF. Therefore, if you want stereo recording the next time, set the stereo recording mode using the above procedure.

Fade-in and fade-out recording

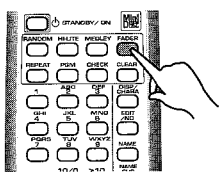
Fade-in recording beginning recording by gradually increasing the volume from a low level, and fade-out refers to ending recording by gradually decreasing the volume.



■ To begin recording with fade-in

Press the FADER button during record-pause.

Fade-in recording does not operate during recovery recording or pause mode of syncro recording.

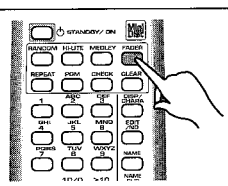


* The operation is available only from the remote control unit.

■ To end recording with fade-out

Press the FADER button during recording.

The track being recorded is ended with fade-out before entering record-pause mode.However, fade-out recording does not operate during syncro recording.



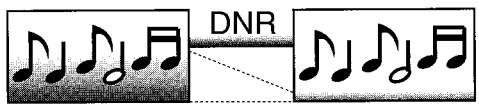
* The operation is available only from the remote control unit.

Note

- *The fade-in and fade-out recording is possible either with digital or analog input. However, digital input can be used only when its sampling frequency is 44.1 kHz.*
- *Fade-in or fade-out recording occurs only once. When it is required in another recording session, perform the same procedure as above every time.*

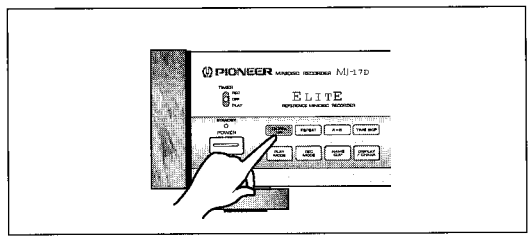
Recording with reduced noise (Digital NR)

The Digital NR function makes it possible to reduce the audible noise in the recorded signal.



1 Press the DIGITAL NR button.

The DNR indicator lights on the main unit display.



2 Perform normal recording operation.

- For digital input recording, follow the procedure on page 16.
- For analog input recording, follow the procedure on page 17.

■ To cancel the Digital NR

Press the DIGITAL NR button again. The DNR indicator disappears from the main unit display.

Note

- *Recording using Digital NR is possible either with digital or analog input. However, digital input can be used only when its sampling frequency is 44.1 kHz.*
- *Even when Digital NR is used, the noise may not be reduced in the following cases.*
  - *When the noise is transient.*
  - *When the noise is extremely large.*
  - *When the frequency range of the input source is low, for example with AM broadcasting.*

MD Editing Features

Editing menu

You can create your original disc by editing it, for example reordering the tracks or dividing a track into two. The following editing functions are available.

■ **Naming a disc or tracks (Name function) ⇨ Page 28**

The name function allows you to name a recorded track or disc.
Each name can use up to 100 characters including alphabets (A to Z, a to z), numerals and symbols.

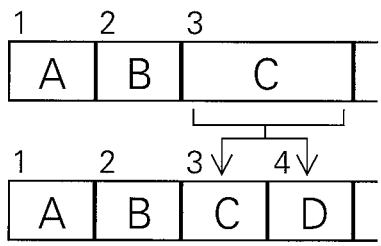
- Naming a disc ..... Page 28
- Naming a track ..... Page 29

It is also possible to store a track or disc name in memory and copy it onto another track or disc.

- Copying a name ..... Page 30

■ **Dividing a track into two (Divide function) ⇨ Page 31**

A track can be divided in the middle of it. The track numbers after the division point are updated automatically.

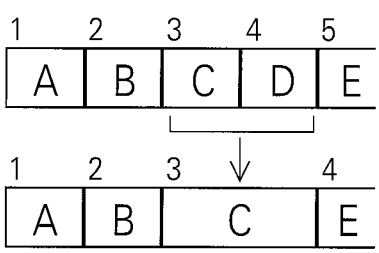


Example when track C is divided into tracks C and D

■ **Combining two consecutive tracks into a single track (Combine function) ⇨ Page 32**

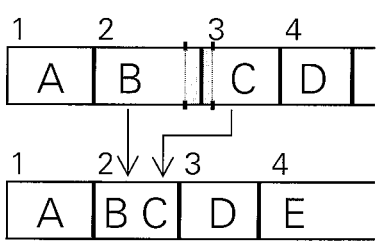
Two tracks, C and D for example, can be combined into a single track C. The track numbers after the combined tracks are updated automatically.

- Combining two tracks into one ..... Page 32



It is also possible to erase a desired section in a track and combine the sections left before and after it into a single track again. For instance, when there is a recording of radio broadcasting, you can erase each talk or commercial section and combine the remaining sections to restore a single track.

- Erasing a section of track and combining the rest ..... Page 49

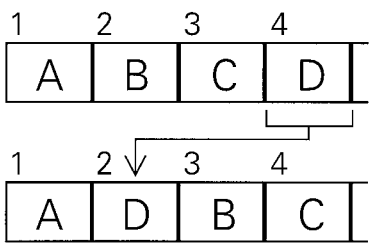


Editing menu

■ Moving or reordering tracks (Move function) ⇨ Page 34

Tracks recorded in a disc can be reordered by changing their positions as specified. After the move, the track numbers are updated automatically.

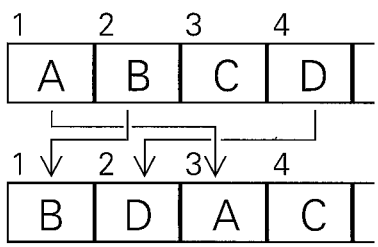
- Moving a track ..... Page 34



Example when track C with track No. 4 is moved to track No. 2

It is also possible to reorder tracks into the programmed order. After the reordering, the track numbers are updated automatically.

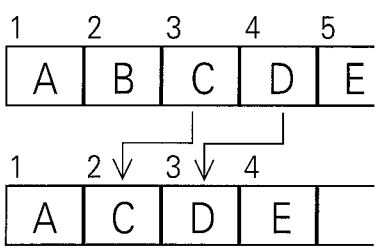
- Reordering tracks ..... Page 35



■ Erasing one or all tracks (Erase function) ⇨ Page 36

An entire track can be erased by specifying its track number. The specified track is erased together with its name. The track numbers after the erased track are updated automatically.

- Erasing a single track ..... Page 36



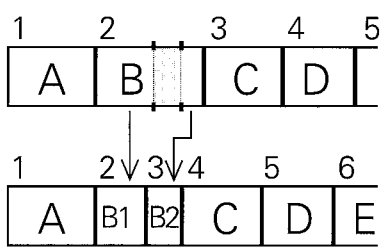
Example when track B with track No. 2 is erased

- Erasing all tracks in a disc ..... Page 36

It is also possible to erase all tracks in a disc. This also erases the disc name.

- Erasing a section of track ..... Page 37

It is also possible to erase a desired section of a track.



Example when a section of track B with track No. 2 is erased

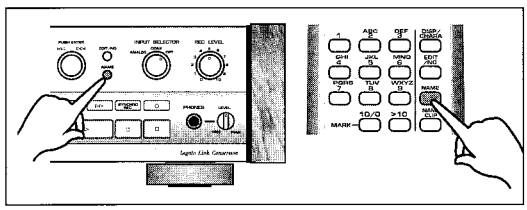
Naming a disc

A recordable MD can be named as desired using up to 100 characters including alphabets (A to Z, a to z), numerals and symbols.

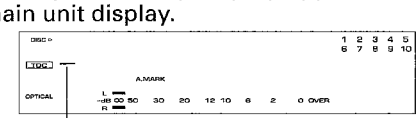
(Example) To name an MD "BEST"

1 Load the disc to be named.

2 Press the NAME button.

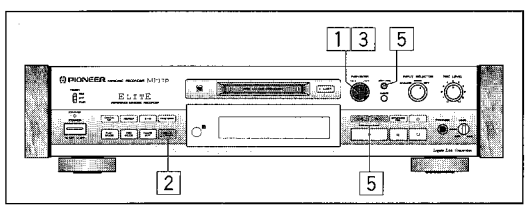


- The input standby display appears on the main unit display.



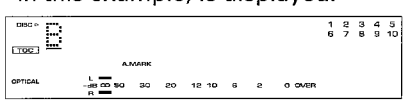
3 Input the disc name.

■ To input characters on the main unit



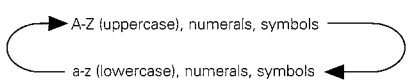
1 Turn the jog dial to select each character.

Turn so that the first character of the disc name, i.e. "B" in this example, is displayed.



2 Press the DISPLAY/CHARA button to select the character type.

Each press of the button switches the character type as shown below.

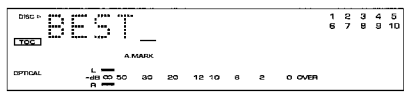


For details, see "MEMO" on P.29 .

3 Push the jog dial to enter the selected character.

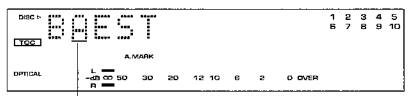
The same effect can also be obtained by pressing the fast forward (►►) button in place of the jog dial.

4 Input all disc name characters by repeating steps 1 and 3 for each.



5 To erase a character input by mistake

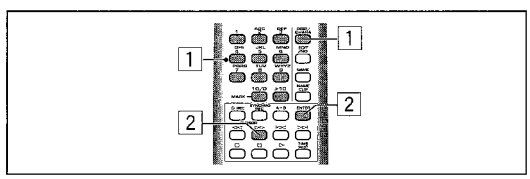
Move the blinking cursor to the character by pressing the fast forward (►►) or fast reverse (◄◄) button and press the EDIT/NO button.



To add or change a character, see P.30 .

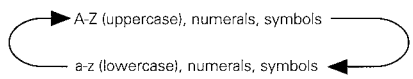
■ To input characters on the remote control unit

Use the numeric buttons.



1 Select each character.

Refer to the "Input character assignment to numeric buttons" on page 29, press one of the buttons to display the first character of the disc name, i.e. "B" in this example.
Press the DISPLAY/CHARA button to change the character type to lowercase alphabet etc. Each press of the button switches the character type as shown below.



For details, see "MEMO" on P.29 .

2 Press the ENTER button to enter the selected character in memory.

The same effect can also be obtained by pressing the fast forward (►►) button in place of the ENTER button.

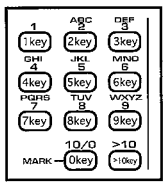
3 Input all disc name characters by repeating steps 1 and 2 for each.

For the way characters are shown on the main unit display and for the method of erasing input characters, see instructions under "To input characters on the main unit".

4 After completing the input of all disc name characters, press the NAME button.

Naming a disc

Input character assignment to numeric buttons



Remote Control Button	Uppercase Alphabets (Lowercase Alphabets)*				
1key	1				
2key	2	A	B	C	
3key	3	D	E	F	
4key	4	G	H	I	
5key	5	J	K	L	
6key	6	M	N	O	
7key	7	P	Q	R	S
8key	8	T	U	V	
9key	9	W	X	Y	Z
0key	0	Symbols**			

* When lowercase alphabet is selected, the characters which can be input using each button change from uppercase to lowercase letters.
** Symbols
!"#$%&'()*+-/:;<=>?@_'_(Space)

Input procedure

Each press of a numeric button changes the input character in the order shown in the above table.
For example, when the character type has been set to "A-Z (uppercase), numerals, symbols" with the DISPLAY/CHARA button, each press of the "2" key switches the input character in order of:

2 → A → B → C

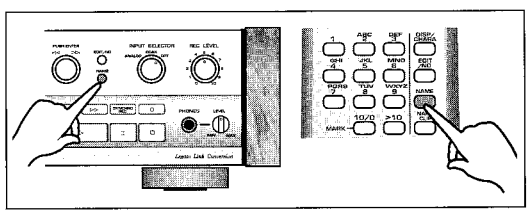
Naming a track

A recorded track can be named as desired using up to 100 characters including alphabets (A to Z, a to z), numerals and symbols.

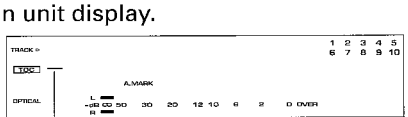
1 Select the track to be named.

During play	The track being played can be named. To name another track, select it before naming it.
During pause	The pausing track can be named. To name another track, select it before naming it.
During record-pause	The track being or about to be recorded can be named.
During stop	No track can be named in stop mode. Select the track to be named.

2 Press the NAME button.



- The input standby display appears on the main unit display.



Characters can be input in the blinking sections.

3 Input the track name.

For the character input procedure, see step ❸ in "Naming a disc" on P.28.

4 After completing the input of all track name characters, press the NAME button.

MEMO

Character types available with the name function

- **Alphabet letters (uppercase)**
  ABCDEFGHIJKLMNOPQRSTUVWXYZ_(Space)
- **Alphabet letters (lowercase)**
  abcdefghijklmnopqrstuvwxyz_(Space)
- **Numerals and symbols**
  1234567890_(Space)!"#$%&'()*+-/
  :;<=>?@_'_(Space)

Correcting a disc or track name

A previously registered disc name can be corrected (by addition or change). However, if an MD contains a disc or track name with more than 100 characters that has been input using other MD recorder than this unit, this unit cannot correct the 101st and later characters.

■ To add a character

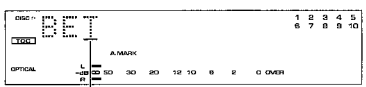
Example) "BET" ⇨ "BEST"

1 Make the MD recorder ready for character input.

- Disc name: Steps ❶ and ❷ on page 28.
- Track name: Steps ❶ and ❷ on page 29.

2 Move to the position where you want to add a character by pressing the fast forward (►►) or fast reverse (◄◄) button.

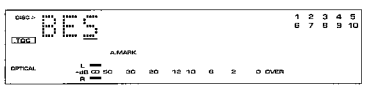
In this example, move the blinking cursor below character "B" to below character "T".



Move cursor below the position where you want to add a character.

3 Select the character to be added with the jog dial on the main unit or a numeric button on the remote control unit.

In this example, Select character "S" so that it is displayed by replacing character "T".



4 Push the jog dial on the main unit.

Character "S" is added and the name becomes "BEST".

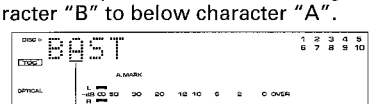
5 Press the NAME button to exit operation.

■ To change a character

Example) "BAST" ⇨ "BEST"

1 After making the MD recorder ready for character input, select the character to be changed by pressing the fast forward (►►) or fast reverse (◄◄) button.

In this example, move the blinking cursl›¿below character "B" to below character "A".



Move cursor below the character you want to change.

2 Select the new character with the jog dial on the main unit or a numeric button on the remote control unit.

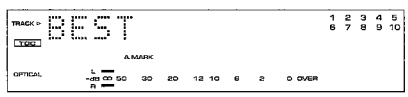
3 Press the fast forward (►►) button then the NAME button to exit.

Copying a name (Name clip function)

The name clip function is convenient when, for example, you want to input similar track names repeatedly. It stores an already input track name and copies it to other tracks as may times as required. The stored name can be composed of up to 100 characters.

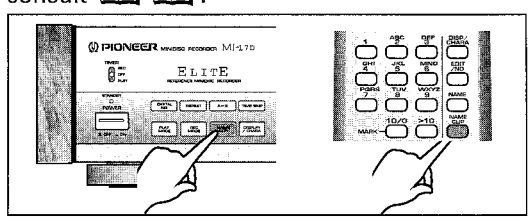
1 Store the name to be copied in memory.

1. While the name is displayed...



2. Press the NAME CLIP button.

Blinking "Name Clip" appears on the main unit display to indicate the name has been stored in memory. If other message is displayed, please consult P.10 P.40.

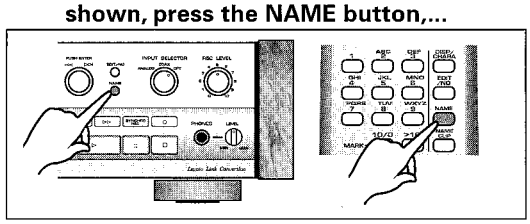


Note

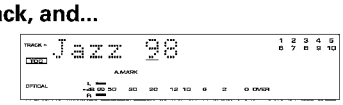
For the protection of copyright, a name recorded in a playback-only MD cannot be clipped and copied.

2 Copy the name.

1. While the track number to be copied is shown, press the NAME button,...

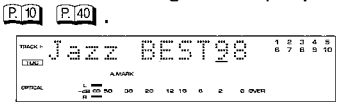


2. press the fast forward (►►) or fast reverse (◄◄) button to select the copy destination track, and...



3. press the NAME CLIP button.

Blinking "Name Insert" appears on the main unit display to indicate that the name has been copied. If other message is displayed, please consult P.10 P.40.



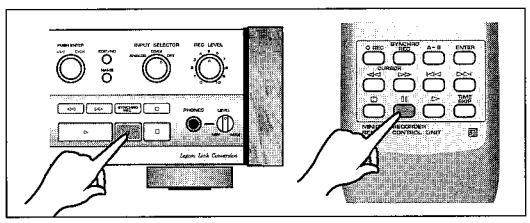
The characters copied using the name clip function are input as shown in the illustration.

4. Press the NAME button to enter.

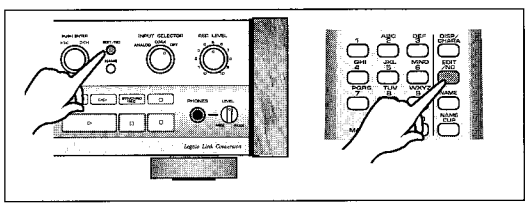
Dividing a track into two (Divide function)

A recorded track can be divided into two tracks any time. This makes it possible to add a track number which can be used to locate the divided point.
This function is convenient when a single track contains two or more pieces of music or when you want to mark a point in the middle of a track. The track numbers after the divided track are updated automatically.

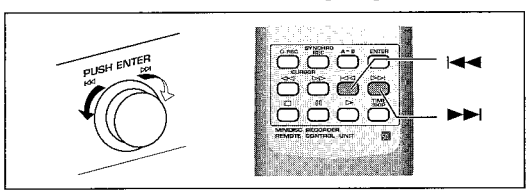
❶ When the point where you want to divide the current track comes during its playback, press the pause (II) button.



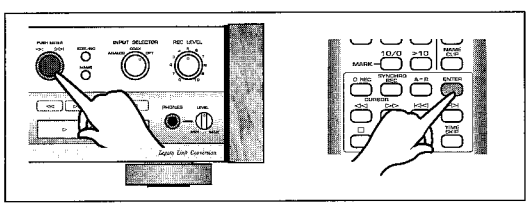
❷ Press the EDIT/NO button to display the editing menu.



❸ Turn the jog dial on the main unit or press the skip (I◄◄ or ►►I) button on the remote control unit so that "Divide" is displayed.

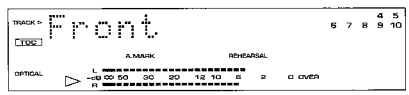


❹ Push the jog dial (or the ENTER button on the remote control unit).

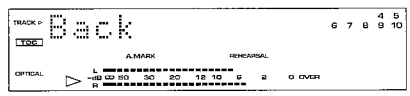


The 4-second sections before and after the point where the pause (II) button is pressed in ❶ (i.e. the point where the track is divided) are played alternately and repeatedly.
To change the point where the track is divided, go to step ❺. If not, go to step ❻.

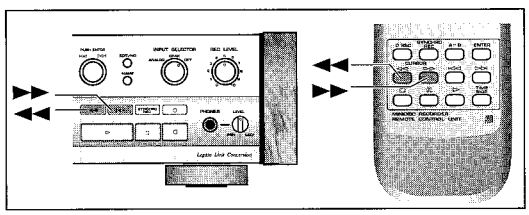
- Display during playback of the 4-second section before the track dividing point



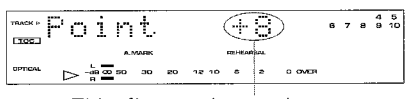
- Display during playback of the 4-second section after the track dividing point



❺ While listening to the repeated playback, fine-adjust the track dividing point.



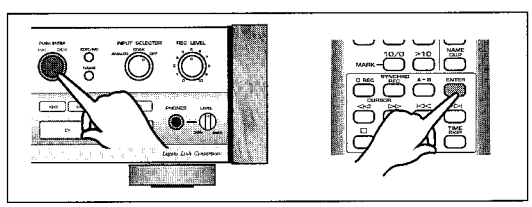
While listening to music, press the fast forward or fast reverse button to fine-adjust the track dividing point.



This figure shows the amount of adjustment of the track dividing point.

- *In this operation, each adjustment step corresponds to about 0.01 second.*
- *The divided point can be fine-adjusted in the range ±255 steps.*
- *To abort operation, press the stop button or EDIT/NO button.*

❻ Push the jog dial (or the ENTER button on the remote control unit).



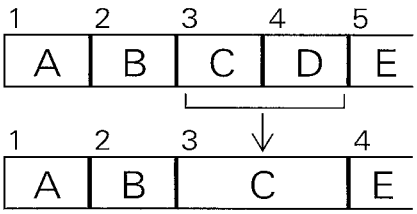
- If the divided track has a name, the same name is given to both tracks obtained by division. However, under the "TOC Full" condition, the name may not be given to the latter track (see P.40).
- Tracks can be divided until the total number of tracks in an MD reaches 254.

Combining two consecutive tracks into a single track (Combine function)

■ Combining two tracks into one

By selecting a track, it can be combined with the previous track to form a single track. The track numbers after the combined tracks are updated automatically.

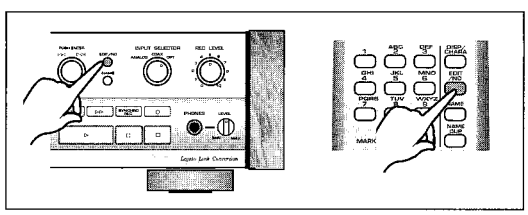
• Example of combining track Nos. 3 and 4



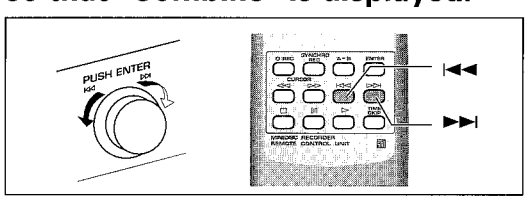
1 During playback of track number 4, press the pause (II) button.

Among the two tracks to be combined, select the larger track number (track No. 4 of track D in the above example).For the method of selecting the track, see instructions under "Skipping to the beginning of a track" on page 15.

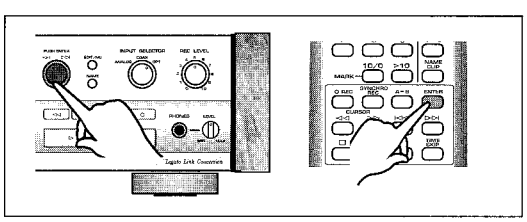
2 Press the EDIT/NO button to display the editing menu.



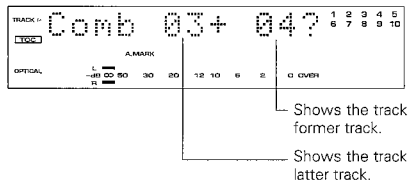
3 Turn the jog dial on the main unit or press the skip (|◄◄ or ►►|) button on the remote control unit so that "Combine" is displayed.



4 Push the jog dial (or the ENTER button on the remote control unit).

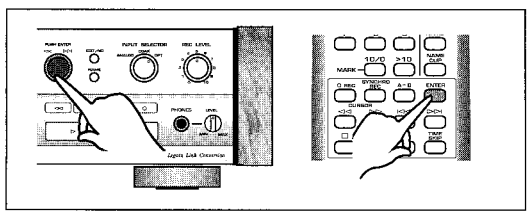


• Confirmation display of the combine function



To abort the combine function, press the stop (■) or EDIT/NO button now.

5 Push the jog dial (or the ENTER button on the remote control unit).



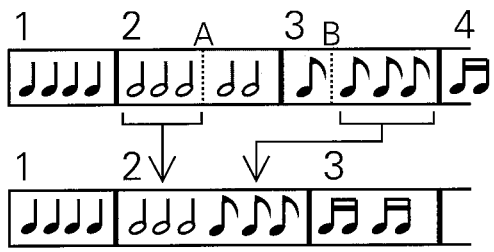
Note

- *If the combined tracks have names, the name of the former track is given to the track obtained by combination. However, if the former track does not have a name, the name of the latter track will be given to the combined track.*
- *Tracks cannot be combined neither in the following cases.*
- *When a track was recorded in long-hour monaural recording while the other was recorded in stereo recording.*
- *When track was recorded from a digital input while the other was recorded from an analog input.*
- *When one or both of the tracks are shorter than 12 seconds.*

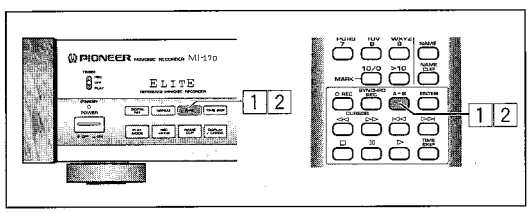
Combining two consecutive tracks into a single track (Combine function)

■ Erasing a section of track and combining the rest

An arbitrarily selected section (the section between points A and B in the diagram shown below) can be erased and the sections left before and after it can be combined into a single track. The track numbers after the combined track are updated automatically.

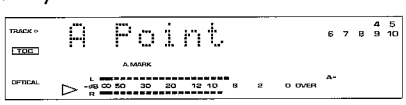


❶ Select start point A and end point B of the section to be erased.



1 Set start point A.

While listening to playback, press the A-B button at the point you want to start the section to be erased.

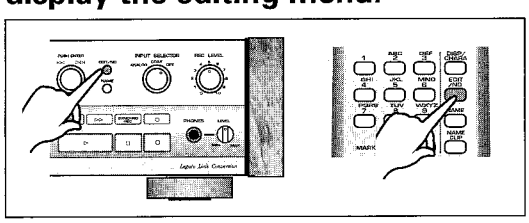


2 Set end point B.

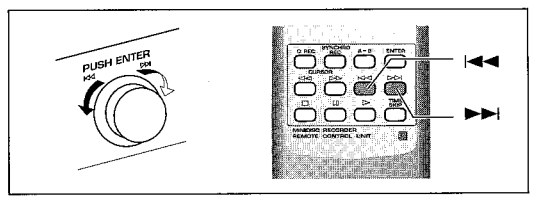
While listening to playback, press the A-B button at the point you want to end the section to be erased. This sets end point B.
If you press the A-B button again, end point B is changed to the point where you pressed the A-B button last.

3 Press the pause (II) button.

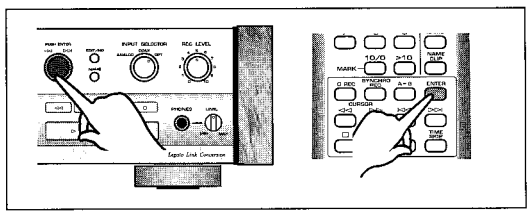
❷ Press the EDIT/NO button to display the editing menu.



❸ Turn the jog dial on the main unit or press the skip (|◄◄ or ►►|) button on the remote control unit so that "A-B Combine" is displayed.

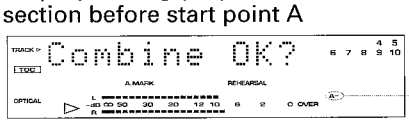


❹ Push the jog dial (or the ENTER button on the remote control unit).



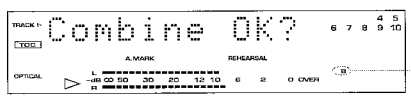
The 2.5-second section before start point A set in ❶ and 2.5-second section after end point B set in ❶ are played alternately and repeatedly. To change start point A or end point B, follow the instructions under "Changing the start point A or end point B setting" on page 38. If this is not required, go to step ❺.

- Display during playback of the 2.5-second section before start point A



Lights.

- Display during playback of the 2.5-second section after end point B



Lights.

- *End point B can be set only after the position of start point A.*
  If "Point ERR" is displayed during setting start point A and end point B, start point A or end point B is not located properly. Change the point position so that the error message disappears.
- *If editing is repeated at a point where you have already executed an editing operation before, the tracks may not be combined properly.*
- *To abort the A-B combine function, press the stop (■) or EDIT/NO button now.*

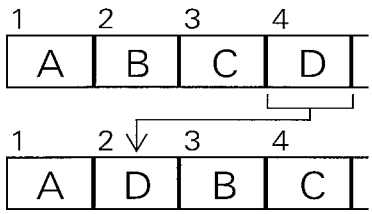
❺ Push the jog dial (or the ENTER button on the remote control unit).

Moving or reordering tracks (Move function)

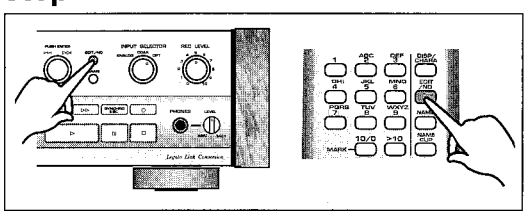
■ Moving a track

A track can be moved to a desired position to reorder the disc tracks.

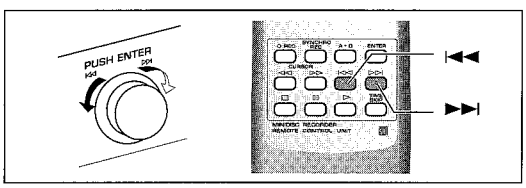
- Example when track D with track No. 4 is moved to track No.2 .



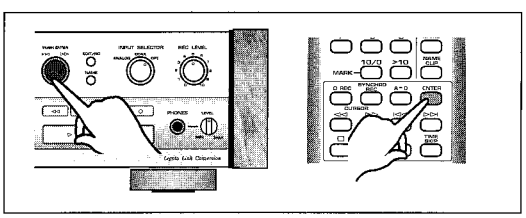
1 Press the EDIT/NO button during stop.

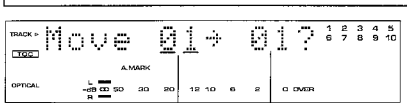


2 Turn the jog dial on the main unit or press the skip (I◄◄ or ►►I) button on the remote control unit so that "Move" is displayed.



3 Push the jog dial (or the ENTER button on the remote control unit).

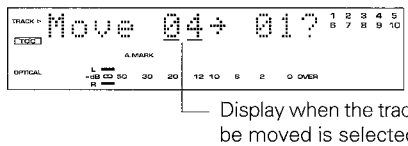




To abort the Move function, press the stop (■) or EDIT/NO button now.

4 Select the track to be moved.

Select the track number by turning the jog dial on the main unit or pressing the skip (I◄◄ or ►►I) button on the remote control unit.



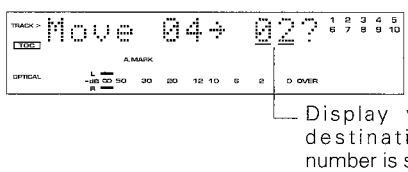
5 Press the fast forward (►►) button.

The blinking cursor below the track number to be moved moves below the movement destination track number.

6 Select the movement destination track number.

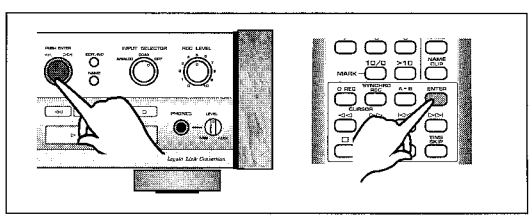
Select the movement destination track number by turning the jog dial on the main unit or pressing the skip (I◄◄ or ►►I) button on the remote control unit.

- Display for moving to track number 2



The status of ❹ and that of ❻ can be switched alternately by pressing the fast forward (►►) or fast reverse (◄◄) button.

7 Push the jog dial (or the ENTER button on the remote control unit).



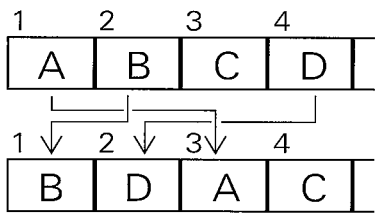
Moving or reordering tracks (Move function)

■ Reordering tracks

The tracks in a disc can be reordered as specified in the same way as programming tracks.

1 Program tracks in the order you want to reorder them.

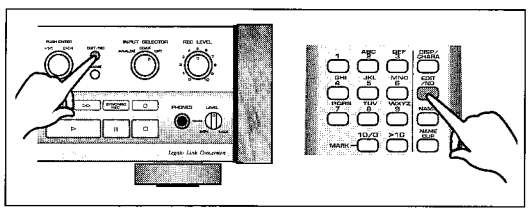
For the programming procedure, follow the instructions under "Playing desired tracks in desired order (Program playback)" on page 19. The tracks which are not programmed are moved together after the last programmed track.



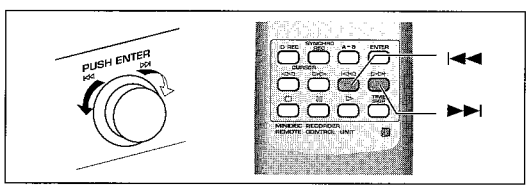
- With the above example, program tracks in order of:

  No. 2 → No. 4 → No. 1 .

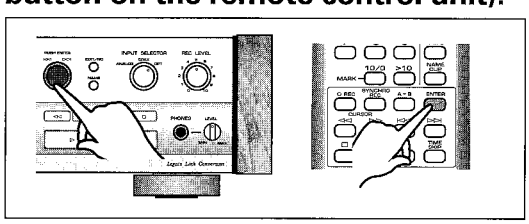
2 Press the EDIT/NO button to display the editing menu.



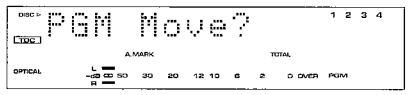
3 Confirm that "Program Move" is displayed on the main unit.



4 Push the jog dial (or the ENTER button on the remote control unit).



- Confirmation display of the program move function



To abort the operation, press the stop (■) or EDIT/NO button.

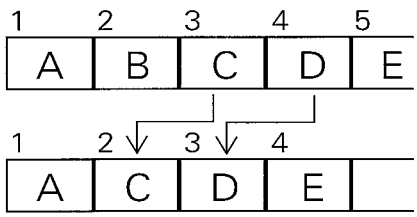
5 Push the jog dial (or the ENTER button on the remote control unit).

Erasing one or all tracks (Erase function)

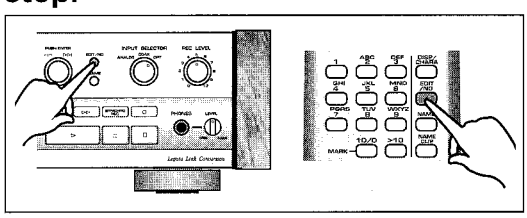
■ Erasing a single track

A selected track can be erased. The track numbers after the erased track are updated automatically.

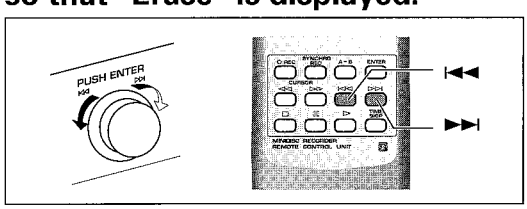
- Example when track B with track No. 2 is erased



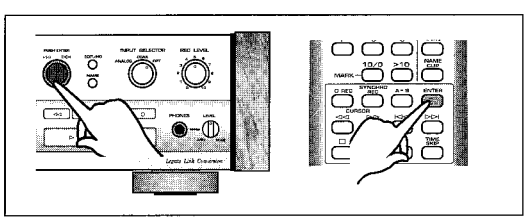
1 Press the EDIT/NO button during stop.

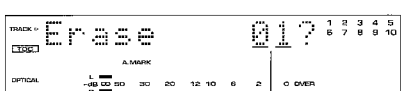


2 Turn the jog dial on the main unit or press the skip (I◄◄ or ►►I) button on the remote control unit so that "Erase" is displayed.



3 Push the jog dial (or the ENTER button on the remote control unit).



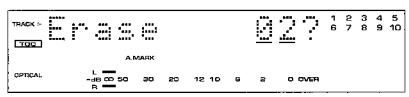


Shows the track number to be erased.

4 Select the track to be erased.

Select the track number by turning the jog dial on the main unit or pressing the skip (I◄◄ or ►►I) button on the remote control unit.

- Display when erasing track "B" with track No. 2



To abort the operation, press the stop (■) or EDIT/NO button.

5 Push the jog dial (or the ENTER button on the remote control unit).

■ Erasing all tracks in a disc

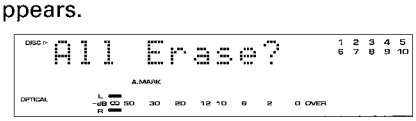
All tracks in a disc can be erased with a single operation. Note that this also erases the disc name.

1 During stop, press the EDIT/NO button to display the editing menu.

2 Turn the jog dial on the main unit or press the skip (I◄◄ or ►►I) button on the remote control unit so that "All Erase" is displayed.

3 Push the jog dial (or the ENTER button on the remote control unit).

- The confirmation display for all-track erasure appears.



To abort the operation, press the stop (■) or EDIT/NO button.

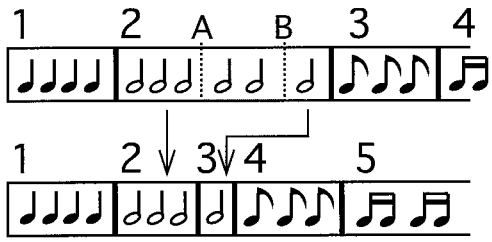
4 Push the jog dial (or the ENTER button on the remote control unit).

"Blank Disc" appears on the main unit display to indicate that the contents of the disc have been erased completely.

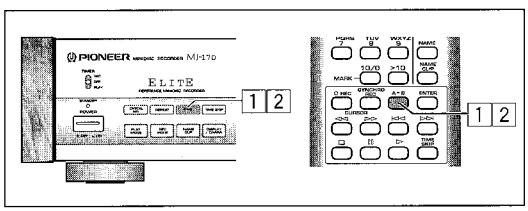
Erasing one or all tracks (Erase function)

■ Erasing a section of track

An arbitrarily specified section within a track (the section between points A and B in the following illustration) can be erased.



❶ Select start point A and end point B of the section to be erased.



1 Set start point A.

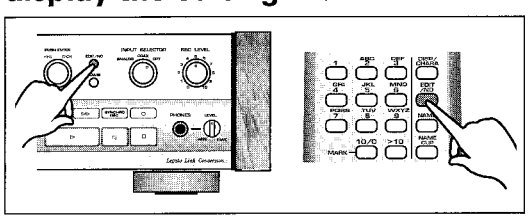
While listening to playback, press the A-B button at the point you want to start the section to be erased.

2 Set end point B.

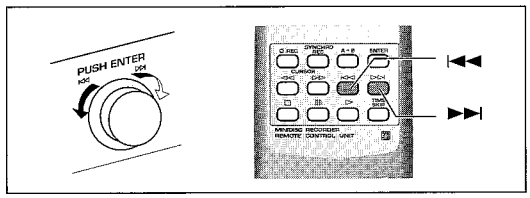
While listening to playback, press the A-B button at the point you want to end the section to be erased. This sets end point B.
If you press the A-B button again, end point B is changed to the point where you pressed the A-B button last.

3 Press the pause (II) button.

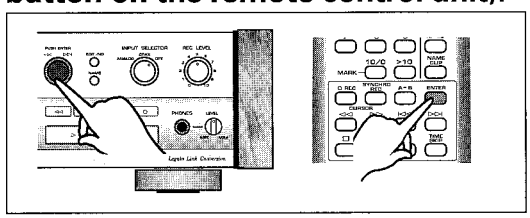
❷ Press the EDIT/NO button to display the editing menu.



❸ Turn the jog dial on the main unit or press the skip (|◄◄ or ►►|) button on the remote control unit so that "A-B Erase" is displayed.

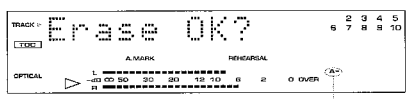


❹ Push the jog dial (or the ENTER button on the remote control unit).



The 2.5-second section before start point A set in ❶ and 2.5-second section after end point B set in ❶ are played alternately and repeatedly. To change start point A or end point B, follow the instructions under "Changing the start point A or end point B setting" on page 38. If this is not required, go to step ❺.

- Display during playback of the 2.5-second section before start point A



Lights.

- Display during playback of the 4-second section after end point B

Lights.

To abort the A-B erase function, press the stop (■) or EDIT/NO button now.

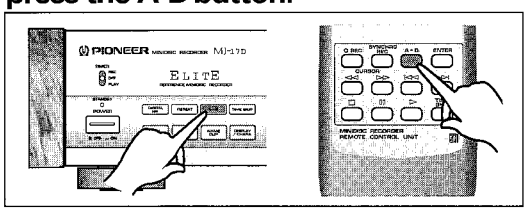
❺ Push the jog dial (or the ENTER button on the remote control unit).

- The sections left before and after the erased section are formed into two separate tracks. If the track before erasure has a name, the same name is given to both tracks obtained by A-B erasure. However, under the "TOC Full" condition, the name may not be given to the latter track (see P.40).

Changing the start point A or end point B setting

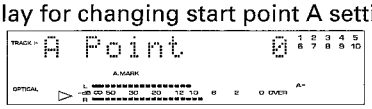
Start point A and end point B which are set when erasing a section and combining the rest (A-B combine function P.33) or erasing a section of track (A-B erase function P.37) can be changed with the following procedure.

❶ In the period in which the 2.5-second section before start point A and 2.5-second section after end point B are played alternately and repeatedly, press the A-B button.

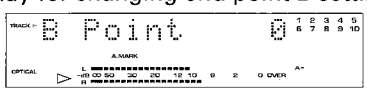


Each press of the A-B button switches the display for changing start point A and that for changing end point B alternately.

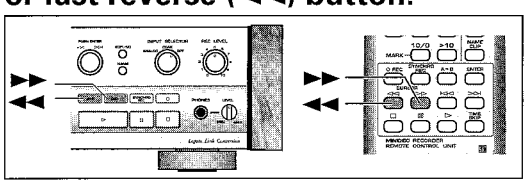
- Display for changing start point A setting



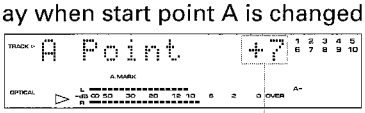
- Display for changing end point B setting



❷ While listening to playback, fine-adjust start point A or end point B by pressing the fast forward (►►) or fast reverse (◄◄) button.



- Display when start point A is changed



This figure shows the amount of adjustment of start point A.

- *In this operation, each adjustment step corresponds to about 0.01 second.*
- *The divided point can be fine-adjusted in the range ±176 steps.*
- *End point B can be set only after the position of start point A.*
  If "Point ERR" is displayed during setting start point A and end point B, start point A or end point B is not located properly. Change the point position so that the error message disappears.
- *If 5 seconds or more have elapsed, restart the procedure from step ❶*

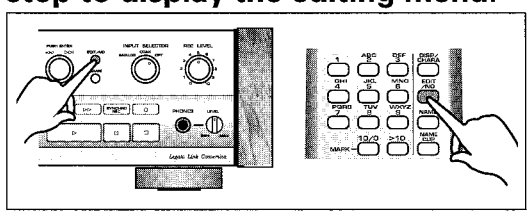
❸ Push the jog dial to execute the above procedures.(or the ENTER button on the remote control unit).

Canceling the last performed editing operation (Undo function)

The last performed editing operation can be canceled to return the MD recorder to the previous status to that operation. However, an editing operation cannot be canceled if any of the following operations is performed after it.

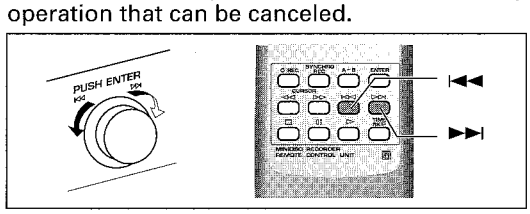
- When a recording operation is performed after editing.
- After UTOC has been rewritten by ejecting the MD or the MD recorder has been switched to the STANDBY mode from the remote control unit

❶ Press the EDIT/NO button during stop to display the editing menu.

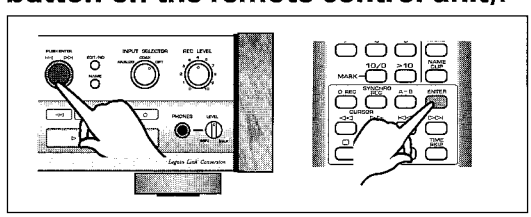


❷ Turn the jog dial on the main unit or press the skip (|◄◄ or ►►|) button on the remote control unit so that "Undo" is displayed.

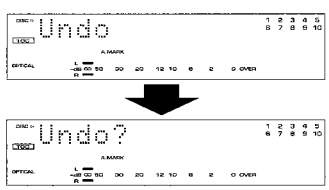
"Undo" is not displayed if there is no editing operation that can be canceled.



❸ Push the jog dial (or the ENTER button on the remote control unit).



- The main unit display changes from the editing mode display to editing confirmation display.

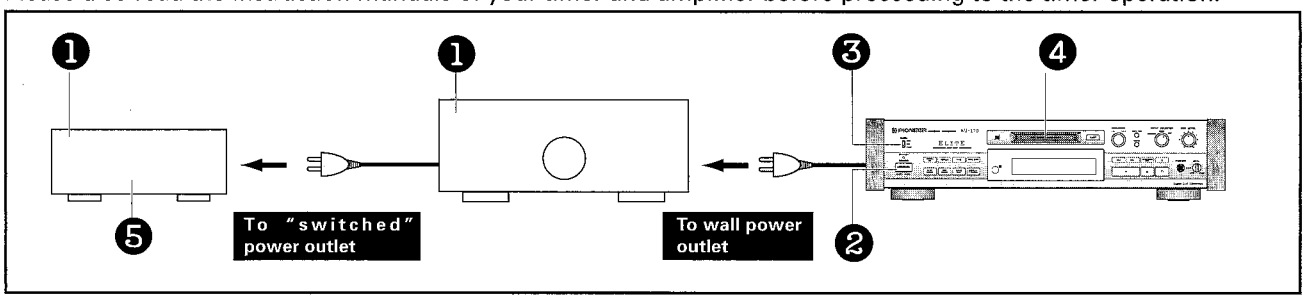


To abort the undo function, press the stop (■) or EDIT/NO button now.

❹ Push the jog dial (or the ENTER button on the remote control unit).

Timer Recording, Timer Playback

By using a commercially-available audio timer, playback can be started at the desired time of the day or recording can be reserved in advance.
Please also read the instruction manuals of your timer and amplifier before proceeding to the timer operation.



Reserving timer playback

1 Turn on the timer and amplifier.

2 Turn on the MJ-17D.

3 Set the TIMER switch to "PLAY".

4 Load the disc to be played.

- To perform program playback, program the desired tracks using the procedure on P.19.
- If the fade play is set, the timer playback can be begun with fade-in. The fade-in of timer playback can be set using the procedure in "Fade-in play using the timer" on P.21.

5 Set the timer to the desired time of the day.

The power supply to the component connected to the timer is shut off after this setting.

Reserving timer recording

1 Turn on the timer and amplifier.

2 Turn on the MJ-17D.

3 Set the TIMER switch to "REC".

4 Prepare recording by using the procedure in "Digital input recording on MD" on P.16 or "Analog input recording on MD" on P.17.

- Long-hour monaural recording is also available. Use the procedure described in P.24.

5 Set the timer to the desired time of the day.

It takes a period of about 1 minute from the beginning of timer operation to the start of recording. Therefore, when setting the timer activation time, it is recommended to set it 1 minute earlier by considering this period.
The power supply to the component connected to the timer is shut off after this setting.

Note

The data recorded by timer recording is backed up, but it will be cleared if the power has not been turned ON for the backup period (about 7days).
After timer recording, turn on the MJ-17D and write the UTOC P.12 in the disc as soon as possible.

Error Messages and Treatment

Message	Description	Treatment
No Disc	• MD is not loaded. • The MD data cannot be read.	• Load an MD. • Reload the MD.
Disc ERR	• The disc is scratched. • The MD does not contain the TOC or the data is abnormal.	• Reload the MD. • Use another MD.
?Disc	• The data is abnormal or the MD is out of standard.	• Use another MD.
Disc Full	• The MD has no space available for recording.	• Use another recordable MD.
Blank Disc	• The MD does not contain any recording. (It does not even contain the recording of the disc name.)	• If you want to play an MD, use an MD which has been recorded.
Playback MD	• An attempt is made to record or edit a playback-only MD.	• Use a recordable MD.
Protected	• The MD is protected against accidental erasure.	• Release the accidental erasure protection.
TOC Full	• The disc does not have the space for recording the track number and character data (including disc/track names).	• Use another recordable MD.
Can't REC	• Recording is not completed correctly due to shock or disc scratch.	• Restart recording or use another MD.
Temp Over	• The temperature is too high.	• Turn power off and wait for a while.
Can't Edit	• Editing is not possible.	• Retry editing by changing the stop position.
Name Full	• There is no space left for registering a disc/track name.	• Shorten the disc/track name.
Defect	• Recording is interrupted due to disc scratch.	• Use another recordable MD.
MECHA ERR -- (-- is a number or symbol.)	• The MD recorder is not functioning properly.	• Turn power off and press the eject button.
Can't Copy	• An attempt is made to record a copy-prohibited material.	• Use a copy-permitted source (an ordinary CD, etc.). • Record the analog input from the source.
Not Audio	• The disc contains non-audio data.	• Use another track. • Use another MD.
UTOC W ERR	• The TOC data cannot be written properly due to shock or disc scratch.	• Turn power off and retry UTOC writing. (Be careful not to apply shock to the unit during UTOC writing.)
UTOC ERR-- (-- is a number or symbol.)	• The recorded TOC data is not conforming to the MD standard or otherwise illegible.	• Use another MD. • Execute the all erase function and record the MD from the beginning.
Din Unlock	• The digital input is not a normal signal.	• Check if the digital signal is connected properly to the digital input jack.
TOC ERR -- (-- is a number or symbol.)	• The disc is scratched or otherwise damaged. • The TOC data cannot be read. • The MD is out of standard.	• Use another MD.
SIO Error	• The internal communication with the mechanism is not possible.	• Turn power off then on again.

➡ Also see "MD system restrictions" P.13 .
➡ Also see "Troubleshooting" P.41 .

Troubleshooting

Symptom	Possible Causes	Treatment
Sound is not output.	• The power cord is unplugged. • All connection cords are not connected completely.	• Connect the power cord correctly. • Connect the cords correctly by referring to the connection instructions.
Recording is not possible.	• The MD is protected against accidental erasure. • A playback-only MD is in use. • The TOC is full (this may occur after repeated recording and editing operations).	• Slide close the accidental erasure protect tab. • Use a recordable MD. • Execute the all-track erase function and record the disc from the beginning.
Recording is monaural.	• The MD recorder is in the long-hour monaural recording mode.	• Use the stereo recording mode.
"No Disc" is displayed when an MD is loaded.	• The disc is scratched.	• Use another MD.
Sound is intermittent.	• Dew is condensed inside the MD recorder.	• Leave the MD recorder for about an hour before retrying playback.
The remaining recording time cannot be increased after erasing some short tracks.	• Tracks shorter than 12 seconds are sometimes not counted by the recording time information.	• This is not a malfunction.
The total of the recorded time and remaining recording time of an MD does not match the maximum recording time of the MD.	• As the minimum unit of recording is 2 seconds, a space of 2 seconds is always used even when the length of track is shorter. As a result, the actually available recording time may be shorter than the value calculated based on the displayed time information. • The disc contains a non-recordable section due to scratch, etc.	• This is not a malfunction. • Use another MD.
Tracks cannot be combined.	• This trouble occurs when the MD experienced repeated recording and editing operations. • An attempt is made to combine a track recorded using a digital input with a track recorded using the analog input.	• This is not a malfunction. • A track recorded using the digital input cannot be combined with a track recorded using the analog input.

- *The picture of a nearby TV may be interfered with noise from the MD recorder, particularly when the TV uses an indoor antenna. In this case, use an outdoor TV antenna or install the TV set more apart from the MD recorder.*
- *Abnormal functioning of this unit may be caused by static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.*

Specifications

Type ..... Mini Disc digital audio system
Recording system .... Field modulation overwrite system
Reproduce system ..... Non-contact optical readout
Sampling frequencies ..... 44.1 kHz
Frequency response ..... 8 Hz to 20 kHz
S/N ratio ..... 101 dB
Wow & flutter ..... Below measurable limit

Power requirements ..... AC 120 V/60 Hz
Power consumption ..... 15 W
Dimensions ..... 461(W) x 106(H) x 294(D) mm
..... (18-3/16 x 4-3/16 x 11-9/16 in.)
Main unit weight ..... 4.8 kg (10 lb 10oz.)

Audio input :
Line input jacks RCA PIN x2 ; refence input level 500mV (input impedance 50 kΩ)

Audio output :
Line output jacks RCA PIN x2 ; refence output level 500mV (input impedance1 kΩ)
Headphone output jack ..... 1.8mW (volume max. , load impedance 32 Ω)

Other jacks :
Coaxial digital input jack ..... RCA PIN ; 0.5 Vp-p (input impedance 75 Ω)
Optical digital input jack x1
Optical digital output jack x1
Control IN jack x1
Control OUT jack x1

Accessories
Warranty card ..... x 1
Operating Instructions (this manual) ..... x 1
Audio cord ..... x 2
Remote control unit ..... x 1
batteries (AA/R6P) ..... x 2

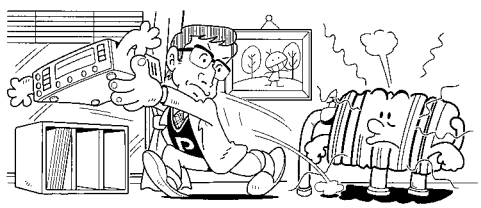
NOTE:
Specifications and design subject to possible modification without notice, due to improvements.

MAINTENANCE OF EXTERNAL SURFACES

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays and other chemicals on or near this unit, since these will corrode the surfaces.

LOCATION

Install the unit in a well-ventilated location where it will not be exposed to high temperatures or humidity.
Do not install the unit in a location which is exposed to direct rays of the sun, or near hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may also result in a malfunction or an accident. (Avoid installation near cookers etc., where the unit may be exposed to oily smoke, steam or heat.)
Do not install the unit on a tottered stand, nor on an unstable or inclined surface.

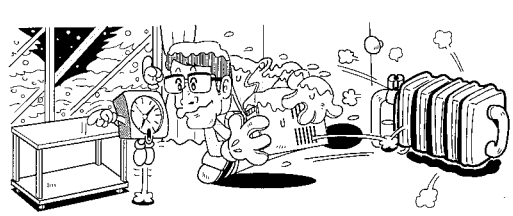


PRECAUTIONS REGARDING INSTALLATION

- Placing and using the unit for long periods on heat-generating sources will affect performance. Avoid placing the unit on heat-generating sources.
- Install this unit as far away as possible from TV sets. A unit installed in close proximity to such equipment may cause noise or degradation of the picture.
- Such noise may be particularly noticeable when an indoor antenna is used. In such a case, make use of an outdoor antenna, or turn off power to the unit.
- **Please place this unit on a level surface.**

CONDENSATION

When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside, and the unit may not be able to attain its full performance. To prevent this, allow the unit to stand for about an hour before switching it on, or raise the room temperature gradually.



Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:
- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

Decibel Level	Example
30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.
THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE	
90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.

Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

800-421-1404

Please do not ship your product to Pioneer without first calling the Customer Service Department at the above listed number for assistance.

PIONEER ELECTRONICS SERVICE, INC.
CUSTOMER SUPPORT DIVISION
P.O. BOX 1760, LONG BEACH,
CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

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